

<110> Andersen, Scott E.
Fisher, Dane K.

<120> Nucleic Acid Molecules and Other Molecules Associated With
Plants

<130> 38-21(15503)B

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tggccagggt ggcctgcag agcgacgacg tcgagctcgt cggcgtgaac gacccttca 180
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 tcagcaccga ctacatgacc tacatgttca agtacgacac tgtgcacgga cagtgggaagc 240
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 tcggcaggat cggaaggctg gtggccaggg tggccctgca gagcgacgac gtcgagctcg 180
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 ttggtgagaa ggaggtcgct gtgtttggct gcaggaaccc tgaggagatc ccatgggtgct 360
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ggaaggctgg tggccagggt ggccctgcag agcgacgacg tcgagctcgt cgccgtgaac 180
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gaagttgctg tgtttggctg caggaaccct gaggagatcc catgggggtc ggttggcgct 360
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<211> 422

<212> DNA

<213> Zea mays

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cggaaggctg gtggccagggt tggccctgca gagcgacgac gtcgagctcg tcgccgtgaa 180
cgaccccttc atcagcaccg attacatgac ctacatgttc aagtatgaca ctgtgcacgg 240
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ggaggttgct gtgtttggct gcaggaaccc tgaggagatc ccatgggggt cggttggcg 360
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<212> DNA

<213> Zea mays

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 ccaagaccct tctcttcggt gacaagccgg tcaccgtctt tggcatcagg aaccctgagg 240
 aaatcccgtg ggggtgaggct ggcgctgagt atgtcgtgga gtccaccggc gtcttcactg 300
 acaaggacaa ggctgctgca catctcaagg gtggtgccaa gcaagctgat atctctgccc 360
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 ctgcagagcg acgacgtcga gctcgtcgcc gtgaacgacc ccttcacac caccgattac 180
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atagaattgg gggcgcgga gaaggtgcca tgtgtgtgtt tgtgtgtgtt gcctgtggat 240
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tctgaagggtg aagaagggtgt tcgtgcgcgc cgacctcaac gtccctctcg acgacgcccc 180
gaagatcacc gacgacaccc gcatccgcgc ctacgtcccc accatcaagt tcctcctcga 240
gaagggcgcc aaggatcatcc tcggcagcca cctgtgtcgt gcaaaagggtg tcaccctaaa 300
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<212> DNA
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ggcgctccgc acggacaaaa tctccgaaac gcccatggct aaggaagaga gggttgatcg 180
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435

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<213> Zea mays

<223> Clone ID: LIB3061-035-Q1-K1-B12

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gatctcgccc ggtggccgca gggtagcagc cgcgttgccct tcggaccagc gcccaggaac 180
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cgaagtgaat tattgacatt ggatagcatc agacaagttt tgattagact agaagacagc 300
atcatatttg gacttttggg gagagcacag ttttgttaca acgctgacac atatgatagc 360
aatgctatcc acatggatg 379

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<211> 392
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<223> Clone ID: LIB3061-034-Q1-K1-D8

<400> 13

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tttccctctt tgaataacag cggaaaactt gacatcttat tggctcaggg caaagagtat 180
gtctttgttg caaactcaga caacttgggt gctatagtcg acatcaagat cctaaaccat 240
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aaagggtggc ctctcatctc ttacgaaagg aagagttcag ctttttggag attgcccgaag 360
taccgatga gcatgtgaat gaatttaaata ca 392

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 <223> unsure at all n locations
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 accttcgacg atctgagcga ccgctaccac acccactgcg acccaaggct gaatgcctcc 180
 cagtccctgg agctcgcctt tatcatcgca gagaggctga ggaagaggag gatgcatcg 240
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 aaagggaggt aggaatagct gtggtgacct cggaggagaa gagacagtcg acgccttggt 360
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 tcgcctgctg ttggtgcatc tgggtgattaa taatactact atgacagagc catgctctgt 240
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 <213> Zea mays
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gagacgaaga agctgctgga taagctcgtt gtgctcaagc ttaacggagg gctcgggacg 360
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<210> 17

<211> 431

<212> DNA

<213> Zea mays

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gcacggatcg aaaagctttc ggaagtaaac ccgatgcttg gcttccgtgg ctgcaggctt 180
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ccgcaggaat tgggacatca ggtggccctt atccgtcaag tcgctaaca agttttcacc 360
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<211> 319

<212> DNA

<213> Zea mays

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<400> 18

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 taccagaggt ctgacttcga aggcattctc cgtgctatgg atggactttc agtgactatt 240
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 cagcagggat gatgtgggga agttcatccc catttatctg gctcagggca tcctccagca 240
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 <223> unsure at all n locations
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<210> 22
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 ggattcataa ggactctgat tatgggtgcg tcggaactta taataataag cacatgaaat 240

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<210> 26
<211> 387
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-017-Q1-K1-E11

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<212> DNA
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 gcccaggccg gagaaccatc gcctgcattt cgatctgttt caccgcaatt cgcattgtta 360
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 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-056-Q1-K1-D8
 <400> 30

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atcatcttct cgatggcgcg tctcgaccgc gtgaagaaca tgacaggcct ggtggagatg 120
tacggcaaga acgcgcgcct gagggagctg gcgaacctcg tgatcgtcgc cggagaccac 180
ggcaaggagt tcaaggacag ggaggagcag gcggagtcca agaagatgta cagcctcatc 240
gacgagtaca agttgaaggg ccatatccgg tggatctcgg cgcagatgaa ccgcgtgcgc 300
aacggtgagc tgtaccgtta catttgcat accaaggcg cattcgtgca gcctgcgttc 360
tacgaaacgt tcggcctgac tgtg 384

<210> 31
<211> 379
<212> DNA
<213> Zea mays
<223> Clone ID: LIB3061-014-Q1-K1-D4
<400> 31

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ggtccatggc atcgatgttt tcgatcccaa gttcaacatt gtctcccctg gagcagacat 120
cactgtttac taccctgata cggaaaccga caagagactc actgccttgc atcctgaaat 180
cgaggagctc atctacagcg acttcgataa ctccgagcac aatttcatgc tgaaggacta 240
catgatgccg atcatcttct cgatggcgcg tctataccgc gtgaagaaca tgactggcct 300
gatcgagatg tacggcatga tcgcgcgcct gagggagctg tcgaacctcg tgatcgttgc 360
cggtgaccac tgcaaggag 379

<210> 32
<211> 439
<212> DNA
<213> Zea mays
<223> Clone ID: LIB3061-015-Q1-K1-A12
<400> 32

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agtccaagga caggaggagg caggcggagt tcaagaagat gtacagcctc atcgacgagt 120
acaagttgaa gggccatata cgggtggatct cggcgcagat gaaccgcgtc cgcaacgggg 180

agctgtaccg ctacatttgc gatacgaagg gcgcattcgt gcagcctgcg ttctacgaag 240
 cgttcggcct gactgtgatc gagtccatga cgtgcggtct gccaacgatc gcgacctgcc 300
 atgggtggccc tgctgagatc atcgtggacg gggatatctgg cctgcacatt gacccttacc 360
 acagcgacaa ggccgcggat atcctgggtca acttctttga caaatgcaag gcagatccga 420
 gctactggga caagatctc 439

<210> 33
 <211> 352
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-005-Q1-K1-C9

<400> 33

gcgcagatga accgcgtccg caacggggag ctgtaccgct acatttgcga tacgaagggc 60
 gcattcgtgc agcctgcgtt ctacgaagcg ttcggcctga ctgtgatcga gtccatgacg 120
 tgcggtctgc caacgatcgc gacctgccat ggtggccctg ctgagatcat cgtggacggg 180
 gtatctggcc tgcacattga cccttaccac agcgacaagg ccgcggatat cctggtcaac 240
 ttctttgaca aatgcaaggc agatccgagc tactgggaca agatctcaca gggcggcctg 300
 cagagaatct atgagaagta cacctggaag ctctactccg agaggctgat ga 352

<210> 34
 <211> 326
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-016-Q1-K1-G2

<400> 34

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 ggctggtgg agatgtacgg caagaacgcy gcctgaggg agctggcgaa cctcgtgatc 180
 gtcgccggtg accacggcaa ggagtccaag gacagggagg agcaggccga gttcaagaag 240
 atgtacaggc tcatcgacga gtacaagttg gagggccata tccggtggat ctaggcgcag 300
 atgaaccggg ttccgcacgg ggagct 326

<210> 35
<211> 451
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-028-Q1-K1-A9

<400> 35

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tcctgaaatc gaggagctca tctacagcga cgtcgagaac tccgagcaca agttcgtgct 120
gaaggacaag aagaagccga tcatcttctc gatggcgcgt ctcgaccgcg tgaagaacat 180
gacaggcctg gtcgagatgt acggcatgaa cgcgcgcctg agggagctgg cgaacctcgt 240
gatcgttgcc ggtgaccact gcaaggagtc caaggacagg gaggagcagg cggagttcaa 300
gaagatgtac agcctcatcg acgagtacaa gttgaagggc catatccggg ggatctcggc 360
gcagatgaac cgcgtccgca acggggagct gtaccgctac atttgcgata cgaagggcgc 420
attcgtgcag cctgcgttct acgaagcgtt c 451

<210> 36
<211> 419
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB3061-004-Q1-K1-F9

<400> 36

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tcctctcttg ccttgatggt tgctggagca atcctcgctg tctggatatc cttggttgta 120
gtgagatctc tcgactctgt cccgttgctc ccaggcatat tggagctagt cgggctcagc 180
tactctggat ggtttgtgta ccgatacctg ctttttcagg aaaaccggaa agaattggcc 240
ggtgttatcg atgatataaa gagaaggatt gttggcgatg atgaatagct gtttcctggt 300
ttgtaattct atttatctcg ccctgtttgg ttctgaggaa ttgaaaaata atccaatggt 360
gaagtggaaa agcactntct agttattggt tntaattcat ggngtccaaa caggctcct 419

<210> 37

<211> 420
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3061-028-Q1-K1-C1

 <400> 37

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 gtaggcgaag atgtggtggc tgaactgcaa acagccatgg agaagcaagg tctggacatg 120
 catgtagctg cattgattaa tgatgctgtt gggacgctgg cgggagcaag gtactacgac 180
 aaagatgttg tgcgtggtgt aatatttggc actggcacia acgcagcata tggtgagaag 240
 gcaaatgcta ttgcaaaatg ggaggggtgag ctgccccatt caggagacat ggtcatcaac 300
 atggaatggg gtaacttctt ctcatctcat cttcccatca ctgaatatga tcaagaatta 360
 gataaggaga gcttaaattcc aggagaacag atttacgaga agttaacgtc aggaatgtat 420

<210> 38
 <211> 418
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3061-030-Q1-K1-G12

 <400> 38

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 cttgattgct gagccttgcc ggacagcaca tctccgtgcc atggagattg ccaaagaggc 120
 aggtgcactg ctctcttatg acccaaacct gagggaggca ctatggccat cccgtgagga 180
 ggcccgacc cagatcttga acatctggga ccaggcagac attgtcaagg tcagcgaagt 240
 cgagctcgag ttcttgacaa gcatcgactc ggtggaggac gatgttgtca tgaagctgtg 300
 gcggcctacc atgaagctgc tcctagtacg tcttgagat caagggtgca agtactatgc 360
 cagggatttc catggcgctg tgccttcctt caaagtacaa caagttgata caactggc 418

<210> 39
 <211> 295
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3061-030-Q1-K1-G11

<400> 39

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cttgattgct gagccttgcc ggacagcaca tctccgtgcc atggagattg ccaaagaggc 120
aggtgcactg ctctcttatg acccaaacct gagggaggca ctatggccat cccgtgagga 180
ggcccgacc cagatcttga gcatctggga ccaggcagac attgtcaagg tcagcgaagt 240
cgagctcgag ttcttgacag gcatcgactc ggtggaagac gatgttgtca tgaag 295

<210> 40

<211> 406

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-030-Q1-K1-A12

<400> 40

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gtgaatgaat ttaaataaat cgagaagttt aagatattca acactaaciaa cttgtgggtg 120
aaccttaaag ctatcaagag actcgtagag gctgaggcac ttaagatgga aattattcca 180
aaccccaagg aagttgatgg tgtgaaagtc cttcaactcg aaaccgcagc tgggtgcagct 240
attcggttct tcgacaaagc gattggaatt aatgttcccc gctcaagggt tctcccagtg 300
aaggctacat ctgatctgtt gcttgtgcag tctgatcttt acaccttggt tgatggcctt 360
gtcatccgca acccatccag agcgaatcca gctaaccctt caattg 406

<210> 41

<211> 412

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-023-Q1-K1-A1

<400> 41

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cccaagtacc cgatgagcat gtgaatgaat ttaaataaat cgagaagttt aagatattca 120
acactaaciaa cttgtgggtg aaccttaaag ctatcaagag actcgtagag gctgaggcac 180
ttaagatgga aattattcca aaccccaagg aagttgatgg tgtgaaagtc cttcaactcg 240

aaaccgcagc tgggtgcagct attcggttct tcgacaaagc gattggaatt aatgttcccc 300
gctcaagggt tctcccagtg aaggctacat ctgatctgtt gcttgtgcag tctgatcttt 360
acaccttggt tgatggcttt gtcacccga acccatccag agcgaatcca gc 412

<210> 42
<211> 319
<212> DNA
<213> Zea mays
<223> Clone ID: LIB3061-016-Q1-K1-G11
<400> 42

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aactcggaca gcttggttgc tatagtcgac atcaagatcc tgaaccatct gatcaataac 120
cagaatgaat actgcatgga ggttactcca aaaacattgg ctgatgttaa aggcgggtact 180
ctcatctctt acgaaggaag agttcagctt ttggagattg cccaagtacc tgatgagcat 240
gtgaatgagt ttaaataaat cgagaagttt aagatattca acactaaciaa cttgtgggtg 300
aacctttaag ctgtcaaga 319

<210> 43
<211> 444
<212> DNA
<213> Zea mays
<223> Clone ID: LIB3061-029-Q1-K1-G11
<400> 43

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atgacaggcc tggtcgagat gtacggcaag aacgcgcgcc tgagggagct ggccaacctc 120
gtgatcggtg ccggtgacca cggcaaggag tccaaggaca gggaggagca ggccggagtgc 180
aagaagatgt acagcctcat cgacgagtac aagttgaagg gccatatccg gtggatctcg 240
gcgcagatga accgcgtccg caacggggag ctgtaccgct acatttgcca tacgaagggc 300
gcattcgtgc agcctgcgtt ctacgaagcg ttccggcctga ctgtgatcga gtccatgacg 360
tgccgtctgc caacgatcgc gacctgccat ggtggccctg ctgagatcat cgtggacggg 420
gtatctggcc tgcacattga ccct 444

<210> 44
 <211> 419
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-011-Q1-K1-D9

<400> 44

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 caagttcgtg ctgaaggaca agaagaagcc gatcatcttc tcgatggcgc gtctcgaccg 120
 cgtgaagaac atgacaggcc tggtcgagat gtacggcaag aacgcgcgcc tgagggagct 180
 ggcgaacctc gtgatcgttg ccggtgacca cggcaaggag tccaaggaca gggaggagca 240
 ggcggagtgc aagaagatgt acagcctcat cgacgagtac aagttgaagg gccatatccg 300
 gtggatctcg gcgcatatga accgcgtccg caacggggag ctgtaccgct acatttgcca 360
 tacgaagggc gcattcgtgc agcctgcgtt ctacgaagcg ttcggcctga ctgtgatcg 419

<210> 45
 <211> 229
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-024-Q1-K1-H5

<400> 45

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 acagaatcta tgagacgtac acctggaagc tctacttcga gaggctgatg accctgaccg 120
 gcgtgtacgg cttctggaag tacgtgagca tactgtagag gcacgagacc ctccgctaca 180
 tcgagatgta ctacgccctg aagcaccgga tcctggcaag ccaggttcc 229

<210> 46
 <211> 379
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB3061-020-Q1-K1-F2

<400> 46

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acgtgcggtc tgccaacgat cgcgacctgc catggtggcc ctgctgagat catcgtggac 120
 ggggtatctg gcctgcacat tgacccttac cacagcgaca aggccgcgga tatcctggtc 180
 aacttctttg acaaatgcaa ggcagatccg agctactggg acaagatctc acagggcggc 240
 ctgcagagaa tttatgagaa gtacacctgg aagctctact ccgagaggct gatgaccctg 300
 accggcggtg acgggttctg gaagtacgtg agcaacctgg agaggcgcgga gacccgncgc 360
 tacatcgaga tgttctacg 379

<210> 47
 <211> 424
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-022-Q1-K1-C2
 <400> 47

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 aaggtcattg gtactgagca cacagacatc attcgcgttc cgttcagaaa tgagaatggc 120
 atcctccgca agtggatctc tcgttttgat gtctggccat acctggagac atacactgag 180
 gatgtttcca gtgaaataat gaaagaaatg caggccaagc ctgaccttat cattggcaac 240
 tacagcgatg gcaacctagt cgccactctg ctgcacaca agttgggagt cactcagtgt 300
 accatcgctc atgccttggg gaaaaccaa taccccaact cggacatcta cttggacaag 360
 ttcgacagcc agtaccactt ctcttgccag ttcacagctg accttattgc catgaaccac 420
 actg 424

<210> 48
 <211> 409
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB3061-008-Q1-K1-H11
 <400> 48

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 agagactcac tgccttccat cctgaaatcg aggagctcat ctacagcgac gtcgagaact 120

ccgagcaciaa gttcgtgctg aaggacaaga agaagccgat catcttctcg atggcgcgctc 180
 tgcaccgcgt gaagaacatg acaggcctgg tgcagatgta cggcaagaac gcgcgcctga 240
 gggagctggc gaacctcgtg atcgttgccg gtgaccacgg caaggagtcc aaggacaggg 300
 aggagcaagc ggagttcaag aagatgtaca gcctcatcga cgagtacaag ttgaaaggcc 360
 atatccggtg gatctcggcg cagatgaacc gcgtncgcaa cggggagct 409

<210> 49
 <211> 392
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-025-Q1-K1-B1
 <400> 49

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 agcggctgga gaaggtcatt ggtactgagc acacagacat cattcgcggt cccttcagaa 120
 atgagaatgg catcctccgc aagtggatct ctcgttttga tgtctggcca tacctggaga 180
 catacactga ggatgtttcc agtgaaataa tgaaagaaat gcaggccaag cctgacctta 240
 tcattggcaa ctacagcgat ggcaacctag tcgccactct gctcgcgcac aagttgggag 300
 tcactcagtg taccatcgct catgccttgg agaaaaccaa ataccccaac tcggacatat 360
 acttggaaca attcgacagc cagtaccact tc 392

<210> 50
 <211> 418
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-028-Q1-K1-C4
 <400> 50

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 gcctgaggga gctggcgaac ctctgatcg tcgccggtga ccacggcaag gagtccaagg 120
 acagggagga gcatgcggag ttcaagaaga tgtacagcct catcgacgag tacaagttga 180
 agggccatat ccggtggatc tcggcgcaga tgaaccgcgt ccgcaacggg gagctgtacc 240
 gctacatttg cgataccaag ggcgcattcg tgcagcctgc gttctacgaa gcgttcggcc 300

tgactgtgat cgagtcctatg acgtgcggtc tgccaacgat cgcgacctgc catggtggcc 360
ctgctgagat catcgtggac ggggtatctg gcctgcacat tgacccttac cacagcga 418

<210> 51
<211> 376
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-021-Q1-K1-A8

<400> 51

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tgaatgacag aatccaaagc cttcgtggtc tccaatcatc cctgagaaag gcagaggagt 120
atctactgag tgttctcaa gacactccct actcggagtt caaccatagg ttccaagagc 180
ttggcttggga gaagggttgg ggtgacactg cgaagcgtgt actcgacaca ctccacttgc 240
ttctcgacct tctggaggcc cctgatcctg ccaacttggga gaagttcctt ggaactatac 300
caatgatgtt caacgttgtt atcctgtctc ctcatggcta cttcgcccag tccaatgtgc 360
ttggataccc tgacac 376

<210> 52
<211> 412
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-025-Q1-K1-B5

<400> 52

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atgagaatgg catcctccgc aagtggatct ctcgttttga tgtctggcca tacctggaga 180
catacactga ggatgtttcc agtgaaataa tgaaagaaat gcaggccaag cctgacctta 240
tcattggcaa ctacagcgat ggcaacctag tcgccactct gctcgcgcac aagttgggag 300
tcactcagtg taccatcgct catgccttgg agaaaaccaa atacccaac tcggacatat 360
acttgacaa attcgacagc cagtaccact tctcttgcca gttcacagct ga 412

<210> 53

<211> 424
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3061-008-Q1-K1-C7

 <400> 53

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 cagtgtacca tcgctcatgc cttggagaaa accaaatacc ccaactcgga catctacttg 120
 gacaagttcg acagccagta ccacttctct tgccagttca cagctgacct tattgccatg 180
 aaccacactg atttcatcat caccagcaca ttccaagaaa tcgcgggaag caaggacacc 240
 gtggggcagt acgagtccca catcgcgttc actcttcttg ggctctaccg tgctgtccat 300
 ggcatcgatg ttttcgatcc caagttcaac attgtctccc ctggagcaga catgagtgtt 360
 tactaccgtg atacggaaac cgacaagaga ctactgcct ttcactctga aatcgaggag 420
 ctca 424

<210> 54
 <211> 447
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB3061-049-Q1-K1-E5

 <400> 54

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 gtcaggttgt gtacattctg gatcaagtcc gtgctttgga gaatgagatg cttctgagga 180
 ttaagcagca aggccttgat atcactccga agatcctcat tgttaccagg ctgttgacctg 240
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 acatcattcg cgttccgttc agaaatgaga atggcatcct ccgcaagtgg atctctcggt 360
 ntgatgtctg gccatacctg gagacatata ctgaggatgt ttccagtga ataatgaaag 420
 aaatgcaggc caagcctgac cttatca 447

<210> 55
 <211> 278

<212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-021-Q1-K1-G6
 <400> 55
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 cggctctgcca acgatcgca cctgccatgg tggccctgct gagatcatcg tggacgggggt 120
 atctggcctg cacattgacc cttaccacag cgacaaggcc gcggatatcc tggtaactt 180
 ctttgacaaa tgcaaggcag atccgagcta ctgggacaag atctcacagg gcggcctgca 240
 gagaatctat gagaagtaca cctggaagct ctactcgg 278

<210> 56
 <211> 408
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-039-Q1-K1-D2
 <400> 56
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 cagatgaacc gcgtccgcaa cggggagctg taccgctaca tttgcgatac gaagggcgca 120
 ttcgtgcagc ctgcgttcta cgaagcgttc ggcctgactg tgatcgagtc catgacgtgc 180
 ggtctgccaa cgatcgcgac ctgccatggt ggcctgctg agatcatcgt ggacggggta 240
 tctggcctgc acattgacc ttaccacagc gacaaggccg cggatatact ggtcaacttc 300
 tttgacaaat gcaaggcaga tccgagctac tgggacaaga tctcacaggg cggcctgcag 360
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<210> 57
 <211> 434
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-051-Q1-K1-G8
 <400> 57
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tcttcctggg ctctaccgtg tcgtccatgg catcgatgtt ttcgatccca agttcaacat 180
 tgtctcccct ggagcagaca tgagtgttta ctaccgtat acggaaaccg acaagagact 240
 cactgccttc catcctgaaa tcgaggagct catctacagc gacgtcgaga actccgagca 300
 caagttcgtg ctgaaggaca agaagaagcc gatcatcttc tcgatggcgc gtctcgaccg 360
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 ggcgaacctc gtga 434

<210> 58
 <211> 285
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-043-Q1-K1-B10

<400> 58
 cagacagctt ccacagtcac cagagcacta gagcagagca acaaccgaca agagcagagg 60
 gagagcgtcg tcagcgagcc cagcagatac gagagagagg atggcggaca tcgcgttgct 120
 ggtggcggag cagttcgaga agacggcaag gcgaggcgcc cccggcgggg acagcggtag 180
 cgacagcggg accggcggcg agacgaggaa cttcggggcc gtggccaagg tgtggagctc 240
 ttgggtggag tccgccttcg ccgcgcgctc cggggtcaga ttcac 285

<210> 59
 <211> 415
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB3061-035-Q1-K1-A12

<400> 59
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 aagagcagag tgagatcgtc gtcagcgagc ccagcagata cgagagagag gatggcggac 120
 atcgcgttgc tgggtggcga gcagttcgag aagacggcaa ggcgaggcgc ccccgcgggg 180
 gacagcggtg gcgacagcgg gaccggcggc gagacgagga acttcggggc cgtggccaag 240
 gtgtggagct cttgggtgga gtccgcctcc gccgccgct ccgggggtcag attcaccgtc 300

gcggtgcagc tggagcccaa gaccgggctc g'cgctggccg n'cgncgacgg cctcttctcc 360
gcctagcgtc ctgcttccat gtcttcctcc tgagcagtgc cagtggtcga gcgag 415

<210> 60
<211> 334
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB3061-037-Q1-K1-G8

<400> 60
ctgcacgcag ctatagctcg cataattaac tcatgggtgc atagagatat gccgccgacg 60
accataatct atgggtccgt ccccttgac tgcattctt tcttcctcct nctcgacctc 120
cttcaattat tcttagcggt tgcttctccc ttccttgacc tttgcttggg accatcgata 180
gttacttatt gggcatggag cagtcattct caatgcagga gatcctcggg cccttctggg 240
agctgctgcc agcgccagcg ccagatccag agccggagca gcctccggta accggcatcg 300
tcgtcggcag tgtcatagac gttgctgctg ctgg 334

<210> 61
<211> 398
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB3061-045-Q1-K1-H8

<400> 61
caacaacaac aaccgcagca ccaccaccaa caacaacaac aacagcacca acaacagcat 60
caatgtgaag gccaacaaca acatcaccaa caatcacaag gccatgtgca acaacacgaa 120
cagagccatg agcaacacca aggacagagc catgagcaac aacatcaaca acaattccag 180
ggtcatgaca agcagcaaca accacaacag cctcagcaat atcagcaggg ccaggaaaaa 240
tcacaacagc aacaatgtca ttgccaggag cagcaacaga ctacaagggtg cagctataac 300
tactatagca gtagctcaaa tctaaaaaat tgtcatgaat tcttaaggca gcagtgcagc 360
cctttggtaa tgccttttct ncaatcacgt ttgatata 398

<210> 62

<211> 417
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3061-046-Q1-K1-F6

 <400> 62

 ctgccccatga cacataaaga ccggttccag aagttgggta ttcgtcctcc aaaaggggtt 60
 cttttgtacg gaccaccagg aactggcaag acactcatgg ctctgcatg tgctgcacag 120
 acgaatgcaa cgtttcttaa attagctggt ccacaacttg tgcagatggt tattggtgat 180
 ggagcaaagc ttgtccggga tgcattccag cttgccaaag agaaagctcc ttgtattata 240
 tttattgatg agatagatgc cattggcacc aaacgttttg atagtgaagt tagcgggtgat 300
 agagaagttc agcggacaat gttggaatta ttgaatcaac tggatggatt cagcagcgat 360
 gagagaataa ggtcatagct gcaactaacc gtgctgacat ccttgaccct gctctga 417

<210> 63
 <211> 438
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3061-021-Q1-K1-D2

 <400> 63

 cagaggcatc ttctgaccaa tgaaaatggt gaaaccagggt agagtatctg actcaaagat 60
 aacaacgttt acatgcagat acaagacaac aatatcattg ttctctgaac acacatgacc 120
 tccattgtga cccagcctgt gatgtcttct cgtggtcatt ctcaagctgg ctgaagttcc 180
 ccttctcctt gatcagctgg atgtggtggt gcttgcagta cagcttcccc tcgtgcgcaa 240
 tgtagttaga agggctgatg gtgcaccctc catggcagca cttgaagcag ctcttgtggt 300
 acatagtgtt gttaacagtg acctggatgc ttaaccgggt gtcaagtga gaaggctcaa 360
 actaccggaa gaatgattga gatggttgaa cacagaatct taccctctca gttggataga 420
 ctgtcttgct gcatccaa 438

<210> 64
 <211> 412
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-034-Q1-K1-B7

<400> 64

cccacgcgtc cgattctacc tatgatatga ttggaggcct tgaccagcaa atgaaaggga 60
tcaaagaggt cattgagctt ccaatcaaac atccggaact gtttgagagc cttggaattg 120
cacaacaaaa ggggtgcctt ctttatggac cttcgggcac aggaaagaca ttgttggcac 180
gtgcggttgc tcatcacact gactgcacct tcatcagggt gtctggttct gagttggttc 240
acaagtatat tgggtgagggc tcccggatgg ttagggaact ctttgttatg gccagggaac 300
atgcaccatc cattatattt atggatgaaa ttgactgtat cggatctgct agaattggagt 360
ctggaactgg caacggtgac agtgaaattc agcgtactat gcttgaactt ct 412

<210> 65

<211> 437

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-045-Q1-K1-A8

<400> 65

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aagagtagca gccggccgga gccgaaaacg acgaggcggg ggcattgggga ggccgccgtg 120
ctgcgacaag gtgggagtga agaaagggcc gtggaccccc gaggaggacc tcatgctcgt 180
ctcctatgtc caggagcacg gccccgggaa ctggcgcgcc gtgccgacca acaccgggct 240
gatgcgctgc agcaagagct gcaggttgcy gtggacaaac tacctccggc cgggaatcaa 300
gcgcggcaac ttaccgacc aggaggagaa gctcatcatc caccttcagg ctctccttgg 360
caaccggtgg gcggcgatag cgtcctactt tgccgagagg acggacaacg atatcaagaa 420
ctactggaac acgcacc 437

<210> 66

<211> 396

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB3061-020-Q1-K1-G7

<400> 66

ggtgatagta aatgatcaat ggggagacag ccggctgtga caggaggggg tgaagcgagg 60
 gccatggaca gcggagagga caagaagctc attagcttat cctgacacat ggccggtgct 120
 gctggcggca gtgcctaaac tcgcagggtc gcttcgttgc ggcaagagct gccgtctgcy 180
 gtggactaac tatcttcgcc ctgacctcaa gcgtggcctc ctcagcactg ccgaggagca 240
 gcttgtcatt gacctccatg ccaagctcgg aaatagatgg tcccagattg ctgccaagtt 300
 gcctgngaga acagacaacg agatcaagaa ccaactggaac acgcacatca agaagaagct 360
 tgtcaagatg ggtgtcgacc cggccacaca cgagcc 396

<210> 67
 <211> 365
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-005-Q1-K1-G1

<400> 67

cttttcccca ctcccgggtc tccagcattc ctatcctctc cccgcccgcc cgtgccgccc 60
 ccgcggtctc cgttgggtctc ccgagccaag atgaatgttg aaaagctcaa gaagatggca 120
 ggtgctgtgc gcaccggggg gaagggttagc gtgcgcagga agaagaaggc agtccacaag 180
 actacaacca cagatgacaa acggcttcaa agcaccttga aaagaatagg agtgaacagc 240
 attcctggta ttgaagaggt caacatcttt aaggatgatg ttgttattca gtttgtaaatt 300
 cctaaagtgc aagcgtcaat tgggtgcta acatgggtgg tcagtggaac tccacagaca 360
 aagaa 365

<210> 68
 <211> 399
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB3061-001-Q1-K2-F2

<400> 68

ggtggctgga gttcctgggtg tcacagaggc tctgtttctg gctaggcaag ctgctttggc 60
 ggaggggagc aagcctgcta gcacccaat gctttacagc tgtgctcttt gtggaaagga 120

gtacagaagc tcgaaagctc acgagcagca tcttaactcg cgatcacatc ttttgaaagc 180
ctctcaggag cccaatgcct ctattgctgg tatcacgata gtcaagccac ttcctgaacg 240
agtctcacga agagctccat ctgcagtaga ggaggatcaa gacgacgatg aggaagaaga 300
gtggggttgaa gttgacccaa gtgagatgga gttggctgat gagtctactt caaacatgca 360
ngaagatgag cactcctcaa aatcagatga tgacatgga 399

<210> 69
<211> 442
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB3061-022-Q1-K1-A3

<400> 69
gccgccgtat caaacgcact ctctccgcc gtcgcccag gcaagatggt tctccagaac 60
gacatcgacc ttctgaacc gccggcagag ctcgagaaac tcaagcacia gaagaagcgc 120
ctcgtccaat cccccaactc cttcttcatg gatgtcaagt gccagggatg cttcagcata 180
accacggttt tcagccactc ccagactgtt gttgtgtgcc caggctgcc aactgttctc 240
tgccagccca cgggaggaaa ggcgaggctc acggagggat gctctttccg ccggaaggga 300
gactagagtg gagtctgtta ttagtactgg atcggttgtc aatctccagt atgtggattc 360
aaattttgct ctgtgccag acgttaaggt catgaactac cttagctaag gctntccgca 420
tgtntgtctg gtgctgctat gt 442

<210> 70
<211> 455
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB3061-048-Q1-K1-C1

<400> 70
gctgcagcgc ctccgccgcc gccgccgat ctaacgcagt tccctccgcc gcagcccag 60
gcaagatggt tctcgagaac gacattgatc tgctcaaccc gccggcagaa ctcgagaagc 120
tcaagcacia gaaaaagaga ctcgtccagt cgcaccaactc cttcttcatg gatgttaagt 180

gccaggggtg cttcagcata accactgttt tcagccactc ccagactggt gttgtgtgcc 240
ctggctgcca aactgtcctc tgccaacca caggaggaaa ggcaaggctc actgagggct 300
gctctttccg caggaaggga gactagagcg gatgtggtct tcaagttttg ctctatgcca 360
gatactagcg tcatgaactg cctttagcta agattttcca taagttggtc tcgagcagct 420
atgtgttgca tgttggtac ttncaaactt atatc 455

<210> 71
<211> 323
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-013-Q1-K1-F7

<400> 71

gcgaagctca aggagaagat tgagaagatg tttaaagggtg aaaagataaa tagcacagag 60
aacaggctcag tgcttcatgt agctctgagg gctccaagag atgcagtcac aaacagtgat 120
gggggtgaatg tgggtccctga gggtcggagt gttaaagata aaatcaagca gttttcagag 180
acttttagaa gtggatcatg gggtggagca actggaaaac cgttgacaaa tgttgtgtcg 240
gttggaatag gtggtagctt tcttggccct ctatttgtgc atactgcact ccagaccgat 300
ccagaagcag cagaatgtgc aaa 323

<210> 72
<211> 355
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-025-Q1-K1-C9

<400> 72

attcactata accttgatac ctggtagata gccatgcttt atgcataatcg tattgcagat 60
gagctcatca agaattgctga ctacattggc acccctgaca agggatcct tgctgctgat 120
gagtccactg gcaccattgg caagcgcctt tccagcatca atgtctagaa cgttgacgag 180
aaccgccgtg cctccgtga gtcctattc tgctgccctg gtgctctcca gtacatcagc 240
gggtgtgatcc tcttcgagga gaccctgtac cagaagacca aggatggcta gccttctgtc 300
gatgtcctga acgagggagg cgttctccat agcatcaagg ttgacaaggg cacca 355

<210> 73
<211> 454
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-021-Q1-K1-G9

<400> 73

gacctttaca gcagctaaac ttacaagata tctccgatgg ttaggtcatg aaacaaaaca 60
cttcaatggt ggaaagtacc gccggctcaa gcatggaact aatcagactg ctgatttctt 120
tcgtggagat aacagggagg gtgtggaggc acgtaacgag gtggctgcat tagcaatgga 180
agatatgcta tcttggatgc aggagggtgg tcaggttggt attttcgatg ccacaaacag 240
cacaagaata cggaggaaca tgctgatgaa aatggctgaa ggaaaatgta agatcatctt 300
tttggaacaa ttatgtaatg accaagatgt tcttgagaga aatatacgat tgaaagttca 360
acaaagtcct gattatgcag agcaaacaga ttttgaagct ggtgtacaag atttcaaaga 420
gcgattgacc tattatgaaa aggtctatga accg 454

<210> 74
<211> 423
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB3061-027-Q1-K1-A8

<400> 74

aagctccgac ccaatctaata cgacacctca ccgagatggg ccgcaagttc ttcgtcgggtg 60
gcaactggaa atgcaatgga accacagatc aggtcgagaa gattgtcaaa accctgaatg 120
aaggacaggt tcccccttca gatgttgctg aggtcgttgt cagccctcct tatgtcttcc 180
ttcctgtggt caagagccag ctgcgccaag agttccatgt tgctgctcag aactgctggg 240
tgaagaaggg aggtgctttc actggtgaag tcagtgtcga gatgctcgtc aaccttggtg 300
ttccctgggt cattcttgga cactctgaaa ggagagctct gctaggagaa tcanatgaat 360
ctgttggaga caaggttgct tatgccctgt cttaaggact aaaggtcatt gcatgttggtg 420
gtg 423

<210> 75
 <211> 338
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3061-006-Q1-K1-B7

 <400> 75

 gccaaataca atttagaagc gccctcctc ctctcccca tccgtaccca atcgaatcga 60
 caccggcg agatggcg caagttcttc gttggtggca actggaaatg caatggaacc 120
 gcagatcagg ttgagaagat tgtcaaaacc ctgaatgaag gaaatgttcc ctcttcagat 180
 gttgttgagg tcgttgtagc tctccttat gtgttctcc cgggtggtaa gagccagctg 240
 cgccaagagt tccaagttgc tgctcagaac tgctgggtga agaaggagg tgcattcact 300
 ggtgaaatta gtgctgaaat gctcgtcaac cttggcgt 338

<210> 76
 <211> 390
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3061-032-Q1-K1-A12

 <400> 76

 ccgcagtga ggactgagga tgagtgaaga ggataaggct gctgcttctg ctgagcggcc 60
 taagagggcc cctaagctca atgaaaggat cctctcctct ctgtccagga ggtccgtagc 120
 tgctcatcca tggcatgac tcgagatcgg tcttggtgct cctgctgtat tcaatgttgt 180
 tgttgagatc acaaaggga gcaaagtcaa atacgagctt gacaagaaaa ctggactgat 240
 taagggtgat cgagtccttt actcatcagt tgtataacct cacaattatg gtttcattcc 300
 aaggactctt tgtgaagaca atgacccaat ggatgtgttg gtctgatgc aggagcctgt 360
 tgttcttggt tcgttcctga gagctagagc 390

<210> 77
 <211> 241
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3061-049-Q1-K1-H2

 <400> 77

tcgtgctcac tctacaagga gagctctgct gggagaatca aatgaatttg ttggaaacaa 60
 ggttgcgat gccctgtctt agggactaaa ggtcattgca tgtgttggtg agacccttga 120
 gcagaaggag gctgggtcta ccatggatgt tgggtgctgca caaacgaaag caattgctga 180
 gaagatcaag gactggagca acgtagtttg tgcctatgaa ccatgttggg ctatcggaac 240
 t 241

<210> 78
 <211> 399
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-035-Q1-K1-C9

<400> 78

cggccacact ggaagccgga gagaatcgag catagccacc gatcgctcct ctccactggg 60
 cagattccag ttccactccg cctccgctgc cggtcgccga ctccgaaact ccgacagtcc 120
 gaccacaatg atccacatat agatgagtgg agaggataag gctgctgctt ctgctgagca 180
 gccgaagagg gccctaagc tcaatgaaag gatcctctct tctctgtcca ggagggtccgt 240
 agctgctcat acgtggcatg atcttgagat cggtcctgat gctcctgctg ttttcaatgt 300
 tgatgttgag atcacaaagg gaagcaaagt taaatatgag ctgcacaaga aaactggact 360
 gattaagggt gatcgagtcc tgtactcatc agttgtata 399

<210> 79
 <211> 453
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-048-Q1-K1-A7

<400> 79

cacgcggccg acagtgtca cttgctccta gtgccattat tccacagttc ctcccaccag 60
 ttacttcaat gggcttcgaa cacctagctg tgcaagccaa catgcaacaa caagcgcttg 120
 tggcgagcgt cttacaacaa ccaattgccc aattgcaaca acaatccttg ccacatctaa 180
 caatacaagc catcacaacg caacagcaac aacagttcct accagcactg atccacctat 240
 ccatggtgaa ccctgccgcc tacttgcaag agcagctgct tgcaccaac ccacttgctc 300

tggcgaacgt agttgcaaac cagcaacaac aacagctaca acagtttctg ccaacgctca 360
 gtcaactagc catggtgaac cctgccgtct acgtacaaca tcatcaactg ctttcatcta 420
 gcccgcctgc tgtgggcaat gcacctacat acc 453

<210> 80
 <211> 428
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB3061-048-Q1-K1-A8
 <400> 80

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 cgcgagattt gaatacccaa ctatacaatc ctacaggcta caagaggcca tcgcagcaag 180
 catcttacgg tcgttagcat tgaccgtcca acaaccatat gccctattgc aacaaccatc 240
 cttaatgaat ctatatctcc aaagaatcgc agcacaacaa ctacaacaac agttgcttcc 300
 aacaatcaat caagtagttg cagcgaacct tgctgcttac ctncagcaac aacaatttct 360
 tccattcaat caactagctg gngtgaacct tgctgcttac ttgcaggcac aacagctact 420
 accattca 428

<210> 81
 <211> 355
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-048-Q1-K1-A9
 <400> 81

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 cttgggtctt ctgcaagtgc tgctacggcg accattttac cacaatgctc acaagctcct 120
 ata'gctaccc ttattccccc gtacctatca ccaacgggtg cttcagtatg tgaaaaccca 180
 attcttaaac cctacaggat ccaacaggca atcgagctg gcattctacc tttatcacc 240
 ttgttcctcc aacaatcacc agccctatta cagcagttac ctttggtgca tttattggca 300

caaaacatca gggcacatca actacaacaa cttgggctag caaaccttgc tgcct 355

<210> 82

<211> 365

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-048-Q1-K1-B1

<400> 82

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gtgcagaagg cgctctcaga caagcaaacc tcgtcagacc tgctgcctgt tgagatggct 120

gtgctgcaag atggagaatt cacctggttc actgataagg cagcgggtgtc cttgctgcag 180

aacaagtaga gtcccatggg aaccttggct cgaagccatt ttagctcata aaataaaaga 240

tccagggggc tgctgcatata gctgcattcg tcctccagga tttcgtgtaa cggagactcg 300

atccttttat gtagtggtgtg ttgttcggag taatgttcaa aaactctatt ggcttccggc 360

ttttc 365

<210> 83

<211> 424

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-048-Q1-K1-B10

<400> 83

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gtaccaagat attatccctc cttgcgcttc ttgcgctttt tgcgagcgca acaaatgcgt 120

tcattattcc acaatgctca cttgctccaa gttccattat tacacagttc ctcccaccag 180

ttacttcaat gggcttcgaa caccagctg tgcaagccta taggctacaa caagcaattg 240

cggcgagcgt cttacaacaa ccaatttccc agttgcaaca acaatccttg gcacatctaa 300

caatacaaac catcgcaacg caacagcaac aacaattcct accagcactg agccacctag 360

ccatggtgaa ccctgccgcc tacttgcaac agcagttgct tgcacatac ccacttgctc 420

tggc 424

<210> 84

<211> 364
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB3061-048-Q1-K1-B11

 <400> 84

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 ctaccaagat attatccctc cttgcgcttc ttgcgctntt tgcgagcgca acaaatgcgt 120
 tcattattcc acaatgctca cttgctccaa ggtccattat tacacagttc cttccaccag 180
 ttacttcaat gggcttcgaa caccagctg tgcaagccta taggctacaa caagcaattg 240
 cggcgagcgt cttacaacaa ccaatttccc agttgcaaca acaatccttg gcacatctaa 300
 caatacaaac catcgcaacg caacagcaac aacaattcct accagcactg agccacctat 360
 ccat 364

<210> 85
 <211> 294
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3061-048-Q1-K1-B12

 <400> 85

 aacaactact accattcagc cagctagctg gtgtgagccc tgctaccttc ttgatacagc 60
 cacagttggt gccgttctac cagcacgctg cgcctaacgc tggcaccctc ttacaactgc 120
 aacaattgct gccattcaac caacttgctt tgacaaaacc agcagcggtc taccaacaac 180
 ccatcattgg tgggtgccctc ttttagatth cttatgagtt atagttcaat aataaagttt 240
 tttgtctgat gtttgtggct tcccagaaat aagaaagtac atttctagat tctt 294

<210> 86
 <211> 447
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB3061-048-Q1-K1-B2

 <400> 86

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cgcgggcgac gaggcgacga acccgacctc ctccctccgcg cccgtccctg ccaccggtcg 120
ccgatattgg aaggagctcg gagggctggg gcgctgacct gagttttatg gagagaggat 180
gccagagctg cgaagcagta ctcgccaagc atgcctaagg tcgaagaagc ttgaagatct 240
gcagccagga gagccgcctg cgaaaccggt gtcacctgct ccgccgaggg caggaaagcg 300
tgctcctaca cgtgctgcta ggggcagaaa gggtgccact gggaaaggag tgccccccgc 360
acctaagact agaagaaagc gngtaatat tgctgacttg gaagctgatc cagcttgtga 420
agaccctnct aaagctgtca agggacc 447

<210> 87
<211> 446
<212> DNA
<213> Zea mays
<223> Clone ID: LIB3061-048-Q1-K1-B4
<400> 87

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cacaatgctc acttgctcct agtgccatta ttccacagtt cctcccacca gttacttcaa 180
tgggcttcga acacctagct gtgcaagcct acatgctaca acaagcgctt gcggcgagcg 240
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ccatcgcaac gcaacagcaa caacagttcc taccagcact gagccaacta gctgtggtga 360
accctatcgc ctacttgcaa tagcagatgc ttgcatccaa cccacttgct ctggcaaagt 420
tagctacata ccaacaacaa caattg 446

<210> 88
<211> 356
<212> DNA
<213> Zea mays
<223> Clone ID: LIB3061-048-Q1-K1-B5
<400> 88

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tctcagacaa gctaacctga tcagagctgc tgcctgtcga gatggctgtg ctgcaagatg 120
gagaattcac ctgggttact gataaggcag cgggtgtcctt gctgcacaac aagtagagtc 180
ccatggtaac cttggctcga agccatttta gctcataaaa tataagatcc aagggcctgc 240
gtgcatagct gcattcgtac tccaggattt cctgtaacgg aaactcgatc cttttatgta 300
gtgtgtgttg ttcggagtaa tgatcaaaaa ctctatcggc ttccggcttt tcaaaa 356

<210> 89

<211> 437

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-048-Q1-K1-B7

<400> 89

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gatttcttga gcgcggtaat tagttgttac gattagctag ctccagctgt cgctgccttg 180
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gatatgggta cagataagct ttattttgtc agtttagttg agtagttagc ctgtgagcgc 300
cgaccagtat gtaatcgttg tcctcctgac tgatatccct ctgttcttgt tggaaggcgc 360
aggttcatat acgagtttaa tatacgttgg taggaaattt cgattacatc acatttaaatt 420
attcattgat ggattga 437

<210> 90

<211> 445

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-048-Q1-K1-B9

<400> 90

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ctcacaagct cctatagctt cccttcttcc cccgtacctc tcaccagcgg tgtcttcggt 180
atgtgaaaac ccaattcttc aaccctatag gatccaacag gcaatcgcag ctggcatctt 240

acctttatca cccttgttcc tccaacaatc atcagcccta ttacagcagt tacctttggt 300
gcatttattg gcacaaaaca tcagggcaca acaactacaa caacttgtgc tagcaaacct 360
tgctgcctac tctcagcaac aacagtttct tccattcaac caactagctg cattgaactc 420
tgcttcttat ttgcaacaac aacaa 445

<210> 91
<211> 431
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-048-Q1-K1-C10

<400> 91

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tgaaattcaa gagaaggcgg gctggcaaga cagactacag ggccaggata aggctgatta 180
accaagacaa aaacaagtac aacacacca aatacagatt tgttgtgcga tttaccaaca 240
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cctactctca tgagttgccca cgatatggtc ttgaagttgg tctgaccaac tatgcagctg 360
cctactgcac tggacttctg ttggctcgcc gtgtgctaaa gatccgtggg ttggataagg 420
agtatgacgg c 431

<210> 92
<211> 426
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-048-Q1-K1-C11

<400> 92

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gatggtgtga cctccatgat gtacactcat cacggattac aagtaacatt tacggggaac 180
ttcaatgagt attttggctt tgccaccgat gtagatgcag tggtttactt gatgctggta 240
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atgcctacat ttgcccttcc tgttcacgat ggtggggtag gtcttgacta tcggatgcat 360
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 ggggtga 426

<210> 93
 <211> 422
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-048-Q1-K1-A6
 <400> 93

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 tcaaaccgc aagatttggg tttgtgattt aggagcagga ggcggcggca atatggaata 180
 taaggcgaga tctactggaa cttcaggaac ttcgtctaaa agtttccgtg atctgtacaa 240
 tatgaagtac tcgagctact taaacgacga accaatgccg gatgctacat cggaaaagga 300
 gcagggaaat gagtatttca aacagaagaa gttcactgat gctattgaat gctactgcag 360
 aagtattggg ctgtctgcta cagcagtcac atttgcaaat agagctatgg catatcttaa 420
 ac 422

<210> 94
 <211> 205
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-047-Q1-K1-H2
 <400> 94

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 aagatggta tcgttctctt cgtgtgcctg gctctgtcag ctgccagcgc ctctgcaatg 120
 cagatgccct gccctgtgc ggcgctgcag ggcttgcacg gacctggcgc cggcctgacg 180
 acgatgatgt gcgccggtgc gctgt 205

<210> 95
 <211> 436
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-047-Q1-K1-H3

<400> 95

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atattggcaa cagcaacaac taccatgaag acgactacct ggtgcctacc tgcagcgatt 180
gctttcatgc agccaagtgt acatgtataa ctgatctgct tattgacagc agcaacaact 240
attaccatac agtcaggtag ctgaagcgag ccgtgctacc tcattgatgc aagcacagct 300
gttgccgcac taccagaacg ctgggcctaa cgctggaatc ttattacaac tgcaacaatt 360
gctgccattc aaccaacttg ctttgacaaa ccagcagcg ttctaccaac aacccatcat 420
tggtggtgcc ctcttt 436

<210> 96

<211> 426

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-047-Q1-K1-H4

<400> 96

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tttctgcagt cggtgaagga agatcgatct acaacaacat gtaagctttc ataagataca 120
tgatttcgtc aaacattggt gaagtcgctt ctatattcct aacttccgcc ctgggcattc 180
atgagggttt gattcccgtc caacttctat gggccaatct agttaccgac aggcccaccg 240
caactgctct aggttttcaat ccgcctgaca aggacatcat gaacaagcca cctatgacga 300
gcgacgactc actgatcact ccctggatct tggtccacta cctggtgatt ggcctttacg 360
ttgggatggc gaccgatggc atcttcggca tatggtacac acatgggtct ttcatgggcc 420
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<210> 97

<211> 407

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-047-Q1-K1-H5

<400> 97

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aggctataca ggggtgattgt cagatatggt tatcgcgatg tgcagaatga tgacctgtag 120
ttcgagaagg agctagtcag caacattgca gagttcatcc gcagcagtgg ggaatatgac 180
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ggaatcaata tgttggaaga ggatggagaa gttgatgcac atgtatcccc tcataaggag 300
atagaccac acaatgcggc acccaagcga aagaaagcca gggtcatgat accaaagagt 360
gctcatgtgg acagtgaggt gcgccgcgag ctgcaggagc tcatgga 407

<210> 98

<211> 272

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-047-Q1-K1-H6

<400> 98

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ttgcggcgcg cgtgctcgcc cgagatggca tacgccagat ctggtgtcgc tgtgaatgac 180
gagagcatgc tcaagttcgt cgagctgcac tcgaagaggc tgcaccggtt cctaactttc 240
aagattgacg acaagttcat ggtgatcggt gt 272

<210> 99

<211> 363

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-047-Q1-K1-H7

<400> 99

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ggctgccagc gccagcgccg ggacctcctg cgtgccgggg tgggccatcc cgcacaaccc 180

gctcccgagc tgccgctggt acgtgaccag ccggacctgc ggcatcgggc cgcgcctccc 240
 gtggccggag ctgaagagga gatgctgccg ggagctggcg gacatccccg cgtactgccg 300
 gtgcacggcg ctgagcatcc tcatggacgg cgcgatcccc ccggggcccg acgcgcagct 360
 gga 363

<210> 100
 <211> 440
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-047-Q1-K1-H8

<400> 100

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 gtgtcttcgg tatgtgaaaa cccaattctt caaccctaca ggatccaaca ggcaatcaca 180
 gctggcatct tacctttatc acccttggtc ctccaacaat catcagccct attacatcag 240
 ttacctttgg tgcatttatt ggcacaaaac atcagggcac aacaactaca acaacttgtg 300
 ctagcaaacc ttgctgcta ctctcagcaa cagcagtttc ttccattcaa ccaactagct 360
 gcattgaact ctgcttctta ttgcaacaa caacaactac cattcagcca ggtacctgct 420
 gcctaccccc agcaatttct 440

<210> 101
 <211> 407
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-047-Q1-K1-H9

<400> 101

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 gcttgggcat gtgaatactt gagctttag cgctaccgga tccagcaggc aataacacgc 120
 ggcatcttat ctgtatcacc gtcgttactc caacaatcat cagccctatt acttcattga 180
 ccttaggtgc atttattggc acagcagatc tgggcccacc aacgacatca gcttgtgcta 240
 gaaaacgtcg ctgcctacta tcagcaacag aagccttttc aattctacca attagctgca 300

ttgaactatg cttactatattt gcgacagcac caactatgat tcagccagct atatgctggc 360
tacccccatc aatgactgac attcaaccaa ctgtcatcat tgaactc 407

<210> 102
<211> 442
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-048-Q1-K1-A1

<400> 102

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ctcccaccag ttacttcaat gggcttcgaa catccagccg tgcaagccta caggctacaa 180
ctagcgcttg cggcgagcgc cttacaacaa ccaattgccc aattgcaaca acaatccttg 240
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ctgagccacc tagccgtggg gaaccctgtc acctacttgc aacagcagct gcttgcatcc 360
aaccacattg ctctggcgaa cgtagctgca taccagcaac aacaacagct gcaacagttt 420
atgccagtgc tcagtcaact ag 442

<210> 103
<211> 362
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-048-Q1-K1-A10

<400> 103

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acagattcat gagctccaac atacttcaca acaacagcgt ccacagtatc tgcaacctca 180
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actgatactt caacaataac cagaagtaca tgtgcaacta cctctgcgac atccattgca 300
ccacaacat caacgctcac cacctacaac acctcgctct agctgtgctt gctgactact 360
ct 362

<210> 104
<211> 422
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-048-Q1-K1-A11

<400> 104

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cctctctccg gtgacagccg cgggatttca atacccaact atacaatcct acatggtaca 180
agaggccatc caagcaagca tcttacggtc attagcatta accctccaac aaccatatgc 240
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acaacaacag ttgctaccaa caatcaatca agtagttgca gcgaaccttg ctgcttacct 360
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gc 422

<210> 105
<211> 422
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-048-Q1-K1-A12

<400> 105

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ccacaatgct cacaacaata cctctctccg gtgacagccg cgggatttca atacccaact 180
atacaatcct acatggtaca agaggccatc caagcaagca tcttacggtc attagcatta 240
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agaatcgcgg cacatcaact acaacaacag ttgctaccaa caatcaatca agtagttgca 360
gcgaaccttg ctgcttacct ccagcaacaa cagtttcttc cattcaatca actagctggg 420
gt 422

<210> 106

<211> 456
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3061-048-Q1-K1-A3

 <400> 106

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 ctcagtcaac tagccatggt gaaccctgcc gcctacgtac aacaacaaca actgctttca 240
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 attgtaccag ctctgactca actagctgtg gcaaaccctg ttgcctactt gcaacagctg 360
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 ttacttaatc cattggtagt ggctaaccga ttggtc 456

<210> 107
 <211> 452
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3061-048-Q1-K1-A5

 <400> 107

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 cttgagccct ccgagttcga ggactccgtc gccagggctt tcttcgacct ggagaacggt 180
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 gtaattgttg ccacaaggag gatcgtgagg ccgccaaga agggttcagc tgttcagcgc 420
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<210> 108
 <211> 447
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-047-Q1-K1-H12

<400> 108

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aacatgacgc tgatggacta cacggtcacc aatggcgcca tcgaggcctt cagcgcgcgcg 420
ctctcgctgc agctggccga caggggc 447

<210> 109

<211> 477

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-047-Q1-K1-F8

<400> 109

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aatgctcact tgctcgtagt gccattatac cacagttcct ccgaccagtt acttcaatgg 180
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<210> 110

<211> 342

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-047-Q1-K1-F9

<400> 110

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ctttatcacc cttgcttctg caacaatcat cagccctatt acaacacgta cctttggtgc 300
atattattggc acaaaacatc atggcacaac aactaccaca ac 342

<210> 111

<211> 387

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-047-Q1-K1-G1

<400> 111

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tcaaccttga gatgtgcatg actgggtctgg acacgaagaa agcttcagtc ttcttcaaga 360
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<210> 112

<211> 389

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-047-Q1-K1-G10

<400> 112

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caccgtctaa gagtggaggc tgctcatggt ggtagaggta atgcttactc gcatgatcgt 120

tcaagtggct ctggtggcgg tggaggagca cgtcgtggtg tgtcgagaca ctcagagtat 180
 cgtgttcttg tcaactggact gccttcttat gcatcatggc aggatttaaa ggatcatatg 240
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<210> 113
 <211> 421
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-047-Q1-K1-G11

<400> 113

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<210> 114
 <211> 451
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-047-Q1-K1-G2

<400> 114

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 ctccttatgc tccttgggtct ttctgcaagt gctgctacgg cgaccatttt cccgcaatgc 120
 tcgcaagctc ctatagcttc ccttcttccc ccgtacctct caccagcggg gtcttcggta 180
 tgtgaaaacc caattcttca accctacagg atccaacagg caatcacagc tggcatctta 240

cctttatcac ccttggttcc ccaacaatca tcagccctat tacatcagtt acctttggtg 300
catttattgg cacaaaacat cagggcacaa caactacaac aacttgtgct agcaaaccctt 360
gctgcctact ctgagcaaca gcagtttctt ccattcaacc aactagctgc attgaactct 420
gcttcttatt tgcaacaaca acaacttcca t 451

<210> 115
<211> 242
<212> DNA
<213> Zea mays
<223> Clone ID: LIB3061-047-Q1-K1-G3
<400> 115

ggtggaccag cagctaaggc ccttcggccc aaattcaacg tgtttgtcaa aaatgtatgt 60
gctcatctgg gagtagctgt gccacacatt gagttgaagc atgtgattgc tgctacaatt 120
ggtcttaagg gtcttggaag cctccttttt attttgagca gctctctcgg tgcttatctc 180
ctgctgctgt accttgcttt gatcactcct atcatccatg acttctacaa ctacgatatg 240
ga 242

<210> 116
<211> 456
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB3061-047-Q1-K1-G4
<400> 116

acaaaaagga ggggcgagga ggacaggag ccgagcgcaa gagctgaggc ttcgccgcga 60
aaccgcagac ctgcgcgcgc cccttcccct ccgcggcgtc gtccctgcac gctctccgat 120
ccaagatgta taagctgggg agaggaaacc gcgacaaggt gcagcagttc atgaccatta 180
ccggcgccag tgagaagggt gcccttcagg cactgaaagc tagtgattgg cacttggaag 240
gagcttttga cttcttctat agccaacctc aggtttctgt ggtcaatact cggcattctg 300
aagatatttt caacagatat aaagaacctg atgctgatat gataatggtg gaaggaatat 360
ctcaattttg caatgatctg caggttgatc ctgaggatat tgtcatgctt gtcatatcat 420
ggcacatgaa agccgccaca atgtgtgaat ntactc 456

<210> 117
<211> 358
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-047-Q1-K1-G5

<400> 117

attagcttta tctactccag agcgcagaag aacccgatcg acaccatgag ggtgttgctc 60
gttgccctcg ctctcctggc tctcgtcgcg agcgccacct ccacgcatac aagcggcggc 120
tgcggtgccc agccaccgcc gccggttcat ctaccgccgc cgggtgcatct gccacctccg 180
gttcacctgc cacctccggt gcatctccca ccgcccgtcc acctgccgcc gccggtccac 240
ctgccaccgc cgggtccatgt gccgccgccg gttcatctgc cggccgccacc atgccactac 300
cctactcaac cgccccggcc tcagcctcat cccagccac acccatgccc gtgccaac 358

<210> 118
<211> 389
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-047-Q1-K1-G6

<400> 118

ctctcccgcg cgcgtgttcg cggcatggcc aggcttccaa tggcgctctc ccgggcccgc 60
atttccccct tcagcaccct cccctgtac tattcttcgc gtcttcaccg ccgcctctc 120
gcccgcttct tctccgtcgc ttcggcaccg ggcggagcga aagggcaccg accggcgggc 180
tccgacgttg aggtgggcgg cgtcaagatc gcgcgcgagg atgttgcgaa ggaggatgat 240
ccgacaaaca acgtgcccga caatatcttt tcgaagatcg gcctgcagct gcacaggagg 300
gataaccatc cccttgggat tttgaagaac acaatctatg attactttga caagaacttc 360
actgggcagt ttgacaagtt tgatgacct 389

<210> 119
<211> 101
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-047-Q1-K1-G7

<400> 119

attggtggtg ccctctttta gatttcttat gagttatagt tcaataataa agttttttgt 60
ctgatgtttg tggcttccca gaaataagaa agtacatttc t 101

<210> 120

<211> 459

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB3061-047-Q1-K1-G8

<400> 120

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gcggctgtgg ctgccagaca ccaccgtttc atctaccgcc tccgttctat atgccgcctc 120
cgttctatct gccgccgag cagcagccgc agccatggca atacccact caaccaccgc 180
agctaagccc gtgccagcag ttcggatcct gcggcgtcgg cagcgtcggc agcccgttcc 240
tggggcagtg cgtcgagttc ctgaggcacc agtgcagccc ggcggcgacg ccctacgggt 300
cgccacagtg ccaggcgctg cagcagcagt gctgccacca gatcaggcag gtggagccgc 360
tgcaccggta ccaggcgaca tacggtgtgg tctgcagtc cttcctgcag cagcagccgc 420
agggcgagct cgcggcgctg atggcggncc aagtagcgc 459

<210> 121

<211> 285

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-047-Q1-K1-G9

<400> 121

caacatagat agcacaatag cgtaccatca aaggcaacca acatattgtg cctcattatg 60
ctccttggtc tctgcgccag cgctgatacc gggaccattt tccccgctat gctcggaagc 120
tccaatactt tcctttatta ccccgtaact ttaacaacca acgacttcgt gttgcgaaaa 180
cccaattctt aatccctcca ggacccatcg ggcaatttaa actggcatct taccttgatc 240
accctagctc atccaacaat cacaaccctt attgcacat ttacc 285

<210> 122
 <211> 424
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB3061-047-Q1-K1-H1

<400> 122

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 gagccaagat ttttgccctc cttgccctcc ttgctctttc agcaagcgct gctacctoga 120
 cttttattcc acaatgctca caacaatacc tctctccggg gacagccgag ggatttcaat 180
 acccaactat acaatcctac atggtacaag aggccatcca agcaagcatc ttacgggtcat 240
 tagcattaac cctccaacaa ccatatgctc tattgcaaca gccatcctta gtgcatctgt 300
 atctccaaag aatcgcgga caacaactac aacaacagtt gctaccaaca atcaatcaag 360
 tagttgcagc gaaccttgct gcttacctnc agcaacaaca gtttcttcca ttcaatcaac 420
 taac 424

<210> 123
 <211> 400
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-047-Q1-K1-H10

<400> 123

ccccgtccga ggtccgagtc cgaccgaagg agagaggcag cagccatggc taagggcggg 60
 ctgagcaaac tccggtgcat ggtcaagagg aggtggcact cgtcgagccg catcgtctcc 120
 cgcgccccgt cgtcaccggc tcacgccgac gccgtcgccg ccacctccgg caacgcgcgc 180
 ggcgctcgt tccacggcgc ggacgaggcg cccaagggcc tgcacgcggt gtacgtcggc 240
 aggtcgcgcc gccggtacct cgtcgcgcat gagctcgtgg gccacctgct gttccagacc 300
 ctcgtccacc gcgccggcgc cgccgggggt cccgcgggta ccgtcatcgt cggctgcgag 360
 gtcgtcctct tcgagcacct tctctggatg ctggaacacg 400

<210> 124
 <211> 325

<212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-047-Q1-K1-H11
 <400> 124
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 ggagtgttag actttgacaa gtttgacgct gtaactgatg cgactgccac taagctagct 120
 gtagcttaca accatcgacg gcgtcactat gatcatctac ggggagtact ttaggcatgc 180
 tgatcgcaag gctgtgctgg cggacaagtt gtaccacatt tgtgaccgga cgagcgcgat 240
 gctcggaact gtacgaaggc atgactgtac atgagggtgat aggactatat gacgcctaga 300
 tccgctgcta gctgctgctg atgat 325

<210> 125
 <211> 389
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-047-Q1-K1-F7
 <400> 125
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 tgctccttgg tctttctgca agtgctgcta cggcgaccat tttcccgcaa tgctcgcaag 120
 ctctatagc ttcccttctt ccccggtacc tctcaccagc ggtgtcttcg gtatgtgaaa 180
 acccaattct tcaaccctac aggatccaac aggcaatcgc agctggcatc ttacctttat 240
 cacccttggt cctccaacaa tcatcagccc tattacaaca gttacctttg gtgcatttat 300
 tggcacaaaa catcagggca caacaactac aacaacttgt gctagcaaac cttgctgcct 360
 actctcagca acagcagttt cttccattc 389

<210> 126
 <211> 354
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-049-Q1-K1-B5
 <400> 126
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ccagaataca ttcaccaagc aatctacaac atggttcaat ccataatcca ggaggagcaa 120
caacaacaac catgtgagtt atgtggatct caacaagcta ctcaaagtgc ggtggcaatc 180
ttgacagcag cacaatacct accatcaatg tgcggcttgt accactcata ctacccaaaat 240
aatccatgca gcagcaatga cattagtggg gtttgcaatt gaagaattgt gtctacctag 300
ccgttatact cctataacgg tgттаagcaa taaagtacca tacattatga tggt 354

<210> 127
<211> 457
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-049-Q1-K1-B6

<400> 127

cggacgcgtg ggtgagacca actagcaaca tagaaagcac aatagtgtac caacaatggc 60
agccaaaata ttttgcttcc ttatgctcct tggctcttct gcaagtgttg ctaccgcaac 120
cattttccca caatgctcac aagctcctat agcttccctt cttcccccat acctctcacc 180
agcgggtgtct tcaatgtgtg aaaccccaat tgttcaaccc tacaggatcc aacaggcaat 240
cgcaacaggc atcttaccat tatcacctt gttcctccaa caaccgtcag ccctattaca 300
gcagttacct ttggtccatt tgggtggcaca aaacatcagg gcacaacaac tacaacaact 360
tgtgctagca aaccttgctg catactctca gcaacatcag gttcttccat tcaaccaact 420
ggctgcattg aactctgctg cttatttgca acaacaa 457

<210> 128
<211> 425
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-049-Q1-K1-B7

<400> 128

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agaagaagag atggccggca agggcgatgg cccggctatc ggcatcgatc tcggcacgac 120
gtactcttgc gtcggcgtgt ggcagcacga ccgcgtcgag atcattgcca acgaccaggg 180
taaccgcaat gagaagggtg aggacctgct tctgctggac gtcacccctc tgctccctggg 240

tctggagact gctggaggag ttatgacagt gctgatcccg aggaacacca ccatccccac 300
 caagaaggag caggtattct ccacctactc ggacaaccag cccggtgtcc tgatccaggt 360
 ctacgagggg gagaggaccc ggacacgcga caacaacctg ctgggcaagt tcgagctctg 420
 cggca 425

<210> 129
 <211> 405
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-049-Q1-K1-B8

<400> 129

cccacgcgtt cggcagcagg aagtgcaaat tcttatcctg cctggggaaa ccaacaagct 60
 ggaggcatga accaaaatgt tggctggagt gctcctgtgc agggaaatcc aggtcaggca 120
 aataacaaca tgaactggaa cgcaccaaat ggtaatccta attggaataa tcaacagaga 180
 gagaatgggg gcaggcactc tggacaccgt ggtgctttta gtggtggtga ctcaagcgga 240
 aggtcatgga agtcacgctc ttgtggccat ggtgggtcaa ggggacataa ccaattctac 300
 cattcaacaa acacagatgg atatccattc aggactgacg ggcattacga taggcagaat 360
 ttaggcaact agaggcgata tgagaatcac aatgagagaa atggt 405

<210> 130
 <211> 436
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-049-Q1-K1-B9

<400> 130

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 cagccctggg acggcagtta cctttgggtcc atttggtggc aaaaaacatc agggcacaac 120
 aactacaaca acttgtgcta gcaaaccctg ctgcatactc tcagcaacat cagttttcttc 180
 cattcaacca actggctgca ttgaactctg ctgcttattt gcaacaacaa ttaccattca 240
 gccagctagt tgctgcctac ccccagcaat ttcttccatt caaccaacta gcagcattga 300
 actctgctgc ttattttacag cagcaacaac tactaccatt cagccagcta gctgatgtga 360

gccctgctgc cttcttgaca caacaacagt tggtgccgtt ctacctgcac gctatgccta 420
acgctggcac cctctt 436

<210> 131
<211> 234
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-049-Q1-K1-C1

<400> 131

ctacttccac tccacaaact ctcaagataa gttttaaatt ctaacctacc ccatccacat 60
ctatatctta atccatattc actctctaac ccattttctcc ctaccttcac tcaccaacca 120
caaccatccc ccctacacaa cccatcctct cccatcaacc ctaccttaca acaaccacaa 180
cactctacct cccatttact acatcaccaa ctacaaccac tctaccaatt aaca 234

<210> 132
<211> 398
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-049-Q1-K1-C10

<400> 132

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tcgaggcatc gccggctccg catcttcggt caggaggaag cccgcacccg gccccgatcc 120
gatggccaac agctacctcc cgcgtcgtat catcaaggat acgcagcgac tgctcatcga 180
gccagcgccg gggatcagcg cgtcgtcttc ggaggagaac atgcgctact tctacgttat 240
gatccttggt cgggcgcatt ctccctatga aggtggagtt attacgcttg aactcttttt 300
acctgaggaa tatcccatgg ctgccccaac ggttacgtct ctgaccaaga tctatcatcc 360
ctacattgac aagctaggta cgatatgcct cgacattc 398

<210> 133
<211> 356
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-049-Q1-K1-C11

<400> 133

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caatcggttg gcgcacctca cacaccaccg ccgccggcta gagcctaggg ccgtaatcgt 120
aacagccacc cctgagactg agatggatac agcggaggag gctgggcagg aagtagtcag 180
cgctgttggg gaggatagta tcccgaagc tgccgcctgc agcagggagg agaggaagga 240
ggaagaggag gaagaagtgg aggtgagctt cgatgaactt ggccctggacg agcagctgaa 300
gagggcggtg aggaagaagg gcatcctcaa ggccaccccg atacagcggg aagcca 356

<210> 134

<211> 407

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-049-Q1-K1-C12

<400> 134

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tgttgctggc gatccacatc cacagcaggt gcaggtgcag cagcagcagc aagcacagat 120
gaggattaac agggccacca gatcccttct tcctcagccg ccgtcgaaac tagactgccc 180
gtccacctgc tccgtgcgct gcggcaacaa ctggaagaac cagatgtgca acaagatgtg 240
caacgtctgc tgcaacaagt gcagctgcgt gccgtcgggg accggccagg acaccogtca 300
cctctgcccc tgctacgaca ccatgctcaa tccacacacc ggcaagctta agtgccccta 360
ggccttcgcc actcatgtta tgtacaatgt actatcatca ctttaat 407

<210> 135

<211> 246

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB3061-049-Q1-K1-C2

<400> 135

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atacaacatt agcattccca aatcaatata acatttataa antctacaat tcaacacaat 120

acccttaact cacacaaatt ttcataccaa tcatcattac tattccatac aacaacttac 180
 ctttcattac ataaatcttt taaacaaact tccttataaa ctcatcata tcattccaaa 240
 attcat 246

<210> 136
 <211> 455
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-049-Q1-K1-C3
 <400> 136

ctagcaacat agaaagcaca atagtgtacc aacaatggca gccaaaatat tttgcctcct 60
 tatgtctcgg ggtctttctg caagtgtgc tacggcgacc attttccgc aatgtctgca 120
 agctcctata gcttcccttc ttccccgta cctctcacca gcggtgtctt cggtatgtga 180
 aaaccaatt cttcaaccct acaggatcca acaggcaatc gcagctggca tcttaccttt 240
 atcacccttg ttctccaac aatcatcagc cctattacaa cagttacctt tgggtgcattt 300
 attggcacia aacatcaggg cacaacaact acaacaactt gtgctagcaa accttgctgc 360
 ctactctcag caacagcagt ttcttcatt caaccaacta ggttcattga actctgcttc 420
 ttatttgcaa caacaacaac taccattcag ccagc 455

<210> 137
 <211> 351
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-049-Q1-K1-C4
 <400> 137

cccacgcgtc cggaccaact agcaacatag aaagcacaat agtgtaccaa caatggcagc 60
 taaggatatg tgcctcctta tgctccttgg tctttctgca agtgcgtgta cggcgaccat 120
 tttcccacia tgctcacaag ctctatagc ttcccttctt ccccgctacc tctcaccaac 180
 ggtgtcttcg gtatgtgaaa acccaattct tcaaccctac aggatccaac aggcaatcgc 240
 agctggcatc ttacctttat cacccttggt cctccaacia tcatcagccc tattacagca 300
 gttacctttg gtgcatttat tggcacaaaa catcagggca caacaactac a 351

<210> 138
<211> 360
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-049-Q1-K1-C5

<400> 138

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tcgggctctg ctgcgtacct acaacagcga caacagttac ttaatccatt ggcagtggct 120
aaccattgg tcgtacctt cctgcagcag caacaacaat tgctgccata caaccagttc 180
tctttgatga accctgcctt gcagcaaccc atcgttgaag gtgccatctt ttagattaca 240
tatgagatgt actcgacaat ggtgccctta taccgacatg tgtttcctag aaataatcaa 300
tatatcgatt gagatttatc tcgatataat acacacaccg ataaacttaa atgcccttaa 360

<210> 139
<211> 453
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-049-Q1-K1-C6

<400> 139

agaagctgat cacaagatcc catcaacaga agtaaaactt gcctcagagt actacttcta 60
catggaaaca cagacagcac tagcagttcc agatgaagat aacactttgg tagtctacag 120
ttcgtcacag taccctgaac ttgcacaaag tgtcatagca aggtgcttag gtattccatt 180
cagcaacgtg cgtgtcatta caagaagggt tggaggaggc tttcgtggaa aggcatcag 240
atcattccaa gttgcaacgg cagctgcact ttgtgcgtac aagttacggc gtcctgttcg 300
aatgtacctt aatcgacca ccgatatggt catggttggt ggtaggcacc cagtgaagc 360
taattatact gtcggattca agaacgatgg gaacgttacg gccttgcatc tagatttatt 420
gattaacgct gggatatctc cagatgcgag ccc 453

<210> 140
<211> 453
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-049-Q1-K1-C7

<400> 140

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caagatatta tccctctttg cgcttcttgc cctttttgtg agcgcaaca atgcgttcat 120
tattccacaa tgctcacttg ctctagtg cttattcca cagttcctac ctccagttac 180
ttcaatgggc ttggaacacc cagctgtgca agcctacagg ctacaacaag cgcttgccgc 240
gagcgtctta caacaaccaa ttgcccaatt acaacaaca tccttggcac atctaaccat 300
acaaaccatc gcaacgcaac agcaacaaca atttctacca gcaactgagcc aactagctgt 360
ggatgaaccct gtcgcctact tgcaacagca gttgcttgca tccaaccac ttgctctggc 420
aaacatagtt gcataccaac aacaacaaca att 453

<210> 141

<211> 390

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-049-Q1-K1-C9

<400> 141

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gcctgggttat gtccttggc ctttctgcaa gtgctgctac tgcgaccatt ttcccgaat 120
gctcgcaagc tcctatagct tcccttcttc ccccgtagct ctaccagcg gcgtcttcgg 180
tatgtgaaaa cccaattctt caaccctaca ggatccaaca ggcaatcgca gctggcatct 240
tacctttatc acccttggtta ctacaacaat catcagccct attacaacag ttacctttgg 300
tgcatattatt ggcacaaaac atcagggcac aacaactaca acaacttggt ctagcaaacc 360
ttgctgccta ctctcagcaa cagcagtttc 390

<210> 142

<211> 455

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-049-Q1-K1-B4

<400> 142

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 aatgcagtgt tgtggaagaa ggaaagttca ggtactacaa attttcagtt gaaggaaatg 120
 tgagtgagaa agtagcttct gggcatgcaa atatcgagat taaaatagat acggacgcga 180
 gcggtggtga cactgatatc tatgtttcaa gacatccttt agtatttcca actcagcacc 240
 gacatgagtg gtcttctcat gaaatgggat cgaaggttct tataactcaa ccacgggatg 300
 ctacattggt cagtgggtgtt tacagtattg gagtttatgg tttcaaaggg acttttaagt 360
 accagctctc tgtagctatc aaggatgtta gtggccaaag gattggtgaa tatgctagtg 420
 cctcggaag tgttgatttt gattctgtgc tgtgt 455

<210> 143
 <211> 309
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-049-Q1-K1-A10
 <400> 143

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 tacataatgc tggccacaac cgattattgt gggtcactgc ttacacatta ctgattacat 120
 attcacatat acttgagcac cctgtctgat gattataact atgccattat aagatagtac 180
 acttctagat agattgactt ccttaatgtg cgctacatat aacatacaca ggatgtgcta 240
 cacgtacatg caatgctgtc aaaattgtac gatctaagct agactatgat acttgccaaa 300
 attgataat 309

<210> 144
 <211> 402
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-049-Q1-K1-A11
 <400> 144

agaaagtgga atccagtagc aacaatagag catcaatggc gaccaagata ctttccctcc 60
 ttatgctcct tgctctttct gcatgtgttg ctaacgcgac aattttccct caatgctcac 120
 aagctcctat agcttccctt cttcccccat accttccatc aatgatagct tcagtatgtg 180

aaaaccagc tcttcaaccc tataggctcc aacaagcaat cgcagcaagc aacatacctt 240
 tatcaccctt gtttcaacaa tcgccagccc tatctttggt gcagtcattg gtacaaacca 300
 tcaaggcaca gcagctgcag caactcgtgc tacctgtgat caaccaagta gctctggcaa 360
 acctttctcc ctactatcag caacaacaat ttcttccatt ca 402

<210> 145
 <211> 434
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-049-Q1-K1-A12

<400> 145

caaacagaga caaacctata ctgctacatg cataatgggt ggtacatggt aaaactatag 60
 caagcgaagg tcgatcgctc gtctatagct agaccactac cacctccatg gtttcttgac 120
 tgatagatag acggacgaga atgaagaagc tagctagcta ctagatatat catcagtaga 180
 gtgttcagtt gttgatgatg gcctcctcct tgcccctggt caccactggg ctgcgccatc 240
 ctctcctcct gcagcagtcg ccgaggggtgg tcctgcagag cgaggacccg accgagtgggt 300
 gcgcgtgggc gcaccaaggg caccgtctgt ggggtggccat gccggactcc ttctgggtgt 360
 acacgtacaa agtggaccgg tgcccgttcc ggggcaacca cgtgtggacg acgtgccctt 420
 acgcgcactg gggg 434

<210> 146
 <211> 325
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-049-Q1-K1-A2

<400> 146

ctactccaga gcgcagaaga acccgatcga caccatgagg gtgttgctcg ttgccctcgc 60
 tctcctggct ctgcgtgcga ggcgcacctc cagcataca agcggcgggt gcggctgcc 120
 gccaccgacg gcggatcatc taaccgacgc ggtgcatctg ccaccttcgg ttcacctgcc 180
 acctccggtg catctcccac cgcgggtcca cctgccgacg ccggtccacc tgccagcgcc 240
 ggtccatgtg ccgcgcgcgg ttcatctgcc gccgcacca tgccactacc ctactaaacc 300

gccccggact aagcctaatt cccag

325

<210> 147

<211> 332

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-049-Q1-K1-A4

<400> 147

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gggcgcacgg acgaccactc cctccacaac gccttcagca cctacggcga ggtcctcgag 120

tccaagatca tcctcgatcg ggagacgcag aggtcccgcg gcttcggcctt cgtcaccttc 180

tccacggagg aggcgatgcg gaacgccatc gagggcatga acggcaagga gctggacggc 240

cgcaacatca ccgtcaacga ggcccagtcc cgcggcggcc gtggaggcgg ctgcggcggc 300

gggtacggtg gtggccgtgg aggcggcggc ta 332

<210> 148

<211> 359

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-049-Q1-K1-A5

<400> 148

ccgagccctg cgctacacgc ccgcgccgcc tactcccagag cgtcgtctcc tcccagagccc 60

cgcgatacac gcccgcgccg tcttctcccg agcgtagtaa gcccgccctgc gtcgagcgcc 120

ggccgagcgc ctgcctgcgt ctagcgccctg cctgcggtgg acggatgagc tgtaccgcgc 180

atatgataga ctgtacgtgc agtaatggta tacggagagg agaccatgag agactggaga 240

ctacagagaa tgtggtggac tgctaggttt ttgtttattg gaaaaatcag aaccctaattg 300

ggtacagaca caagacagtg taatatgggg actcgatcaa cttgggggttc gtaaaggat 359

<210> 149

<211> 348

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-049-Q1-K1-A6

<400> 149

aacatagaaa gcacaatagt gtaccaacaa tggcagccaa aatattttgc ttccttatgc 60
tccgggggtct ttctgcacgt gttgctaccg aaaccattat gccacaatgc tcacaagctc 120
ctataacttc ccttcttctc ccataccttt caccagcggg gtctacaatg tgtgaaaccc 180
caattgttca atcctacagc atccatcagg caatcacaa aggcatTTTA ccattataaa 240
cttcgatcct gcaacaacag tgagtcctat tacagcaatg acctttgggc cattcggttg 300
cacacagaat caggacacac caacttcagc acttgggtcat atcaaact 348

<210> 150

<211> 417

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB3061-049-Q1-K1-A8

<400> 150

ggtcttcaga ccattagctt tatctactcc agagcgcaga agaaccggat cgacaccatg 60
agggtgttgc tcgttgccct cgctctcttg gctctcgctg cgagcgccac ctccacgcat 120
acaagcggcg gctgcggctg ccagccaccg ccgcccgttc atctaccgcc gccggtgcat 180
ctgccacctc cggttcacct gccacctccg gtgcatctcc caccgccggt ccacctgccg 240
ncgccggtcc acctgccacc gccgggtccat gtgccagccg ccgttcatct gccgccgcca 300
ccatgccact accctactca aaccgcccgg cctcagcctc atccccagcc acacccatgc 360
ccgtgccaac agccgcatnc aagcccgtgc cagctgcagg gaacctgcgg cgttggc 417

<210> 151

<211> 306

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-049-Q1-K1-A9

<400> 151

atacttgttc actggcagtg agaccacctc agtttggttg gaggtttctg aagtgaaggg 60
agatgatgtg gtgtgtataa gcaagatcac agccaccttg gcttggtcac ttggtaagct 120
tgattggttc caaattcaca ttgacttggc caacctgtct gatgaagatt aggggtgtcat 180

tagaaaaatgg ggtactccca attagattga cttcctttct ctggcctaca caagacatgc 240
 agaggatgtg cgccaggcac cggaattcct gtcaaaattg ggccatctaa gccagactct 300
 gattttt 306

<210> 152
 <211> 419
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-049-Q1-K1-B1

<400> 152

acctagcgaa ggcactagc aacgacctaa caacaatggc ttccaagaca ttatccctcc 60
 ttgcgcttct tgcccttttt gtgagtgc aaatgcgtt cattattcca caatgctcac 120
 ttgctccgag tgccattatt ccacagttcc tccctccagt tacttcaatg ggcttcgaac 180
 acccagctgt gcaagcctat aggtacaac aagcgcttgg ggcgagcgtc ttaaaacaac 240
 caattgccca attacaacaa caatccttag cacatctaac catacaaacc atcggaacgc 300
 aacagcaaca agcactgagc cacctaacc gggatgaacc tatcggctac ttggaacaac 360
 cggatggtgc attcaaccca attgctttgg caaacctaac ttgataccaa ccaccacca 419

<210> 153
 <211> 328
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-049-Q1-K1-B10

<400> 153

gcagcagccg caaagcgggc aggtcgcggg gctgatggcg gcgcatatag cgcaccaact 60
 gacggggatg tgccgctgac agcagccgac tccatgcccc tacgctgctg ccggcgggtg 120
 tccccactga agaaactatg tgctgtagta tatccgctgg ctagctagct agttgagcca 180
 tctagcggcg atgatcgagt aataatgcgt cagcatgac catgggtggc acatgtcagt 240
 gtgagcaatg acctgaatga acaattgaaa tgaaatgaaa ccaactagca acaattgaac 300
 tctgctgctt atttacagca gctacaac 328

<210> 154
 <211> 302
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3061-049-Q1-K1-B11

 <400> 154

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 accttcttga cacatccaca gttgttgccg ttctaccagc acgttgcgcc taacgctggc 120
 accctcttac aactgcaaca attgctgcc a ttcaaccaac ttgctttgac aaacccagca 180
 gtgttctacc aacaacccat cattggtggt gccctctttt agatttctta tgagttatag 240
 ttcaataata aagtttttta tctgatgttt gtggcttccc agaaataaga aagtacattt 300
 ct 302

<210> 155
 <211> 313
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3061-049-Q1-K1-B12

 <400> 155

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 aatatcgtgt cagactgtca caccctgac ctctctccta tcgcaataaa tgtgttcatt 120
 atacaacaaa tccctctaaa aacaactgcy attataactc acggaagatg acgatacaat 180
 tgatgcagcc taggatacac attctttcat cgctacgacg aaccataagg tagcgatgcc 240
 cgatgccata tcctctacgt aggctaattg aactaacaat cttcaccgat agtaaaccctt 300
 ctaatactac atc 313

<210> 156
 <211> 419
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3061-049-Q1-K1-B2

 <400> 156

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ttgcgggtat ggccacaaag gaaataatct gattctaggc gactggaccg gttgctctgc 120
 ttgaaaccgc gtctgggtta agctgtgaag ctctgcagc cgcttgctcc tgcagttatg 180
 cgtcaagtgt ctaccaactc tagcatatgt agtgctgcgt aagatgtcgg cacctcagat 240
 agacagaggc gccatatatc ttgctcatgt aaagttatat cgtgtatgct cgttagtatg 300
 tactgcatga agcattgtaa aattgagcaa cagcaaccag agctcgagaa tcttaagcgc 360
 aaccaaccaa ccccgatcgc atgaattgac aataaagctg aatatttttag gtgttttaa 419

<210> 157
 <211> 162
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-049-Q1-K1-B3

<400> 157

ctgcagcgca gcaaacaaca cgaaccatgc tacaactaat ttaaagtact ttattgatca 60
 ccgggggatgg gaaactcgcc gagaatactg gaccttaggc tactagacct cctgttctct 120
 ttcaaacgcc cggccgacta acacaactac ttcttgacgc ca 162

<210> 158
 <211> 456
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-049-Q1-K1-A1

<400> 158

tcagcattca aaaacacacc aagcgaagcg cactagcaac gacctaacac caatggctac 60
 caagatatta gccctccttg cgcttcttgc ccttttagtg agcgcaacaa atgcgttcac 120
 tattccacag tgctcacttg ctctagtgc cattattcca cagttcctcc caccagttac 180
 ttcaatgggc ttcgaacatc cagccgtgca agcctacagg ctacaactag cgcttgccggc 240
 gagcgctta caacaaccaa ttgcccaatt gcaacaacaa tccttggcac atctaaccct 300
 acaaaccatt gcaacgcaac aacaacaaca acaacagttt ctgccatcac tgagccacct 360
 agccgtggtg aaccctgtca cctacttgca acagcagctg cttgcatcca acccacttgc 420
 tctggcgaac gtagctgcat accagcaaca acaaca 456

<210> 159
<211> 432
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-048-Q1-K1-G5

<400> 159

tgctgatcgt tgcccttgct ctctggctc tcgctgcgag cgccgcctcc agggcaaggg 60
gcggctgtgg ctgccagaca ccaccgtttc atctaccgcc tccgttctat atgccgcctc 120
cgttctatct gccgccgag cagcagccgc agccatggca atacccact caaccaccgc 180
agctaagccc gtgccagcag ttcggtatct gcggcgctcg cagcgtcggc agcccgttcc 240
tggggcagtg cgtcgagttc ctgaggcacc agtgcagccc ggcggcgact ccctacgggt 300
cgccacagtg ccaggcgctg cagcagcagt gctgccacca gatcaggcag gtggagccgc 360
tgcaccggtg ccaggcgaca tacggcgctg tcttcgagtc cttcctgcaa cagcaaccgc 420
aaggcgagct cg 432

<210> 160
<211> 402
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-048-Q1-K1-G6

<400> 160

caattagctc atcgactcca gattggagaa ctgcacacca tgaagggtgct gatcgttgcc 60
cttgctctcc tggcgctagc tgcgagcgcc gtctacagta caagcggcag ctgtggctgc 120
cagacaccac cgtttcatct accgactccg ttctatatgc cgactccgct ctatctgccg 180
acgtaacagc agccgcagcc atggcaatac cccactcaac caccgcagct aagcccgtgc 240
cagcagttcg gatcctgcgg cgtcggcagc gtcggcagcc cgttctctgg ccagtgcgtt 300
gagttcctga ggcaccagtg cagcccggcg gctacgccct aaggatcgac acagtgccag 360
gcgctgcata agcagtgcgt tcaccagatc aagcacgtgg ag 402

<210> 161
<211> 284

<212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-048-Q1-K1-G7
 <400> 161
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 gatatcaggc tcgaggatct acaccatcaa atttcgactg cgactatgct tatgctcttg 120
 gacgtatctc cctgcatatg attacagttg gattgactgg ctacatggca actgcggcta 180
 atctgaaaga ccctgttgag aaatggagat gtgctgctgc tcctttaact gcgatgatga 240
 gtgtgaagag gcatttacgt ggccctggag caatccctat aggg 284

<210> 162
 <211> 408
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-048-Q1-K1-G8
 <400> 162
 cggacgcgtg ggcgctagcg ccttccctcc ggaaacggaa ggctctcgtg accaccggga 60
 tgtccgccat ggagaccgac atcaacgcgc cgtcgccgtc cgccccagct ggcgagggat 120
 cctctgcggc cgggtccgttc tcctcccgca agcccaacaa gcgcttcgag atcaagaagt 180
 ggaacgccga cgcgctctgg gcatgggata tcgtcgtcga caactgcgct atctgccgca 240
 accacatcat ggatctatgc atcgagtgcc aggcgaacca tgccagcgcg accagcgagg 300
 agtgcactga tgcttgggga gtctgtaatc atgcttttca cttgcactgc atcagcaggt 360
 ggcttaagac tcgtcaagtg tgcccattag ataacagtga gtgggagt 408

<210> 163
 <211> 426
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-048-Q1-K1-G9
 <400> 163
 gcccaagttg ccccagagct tgtagtttac tcggagctac ttagtacaaa gaggctatac 60
 atgcacgggtg taacgaccgt aaagccaggg tggcttttga agtatgccag ttccctctgc 120

accttctctg cgcctctgga agatccgaaa cgtactatg acccactgaa cgaccaagtc 180
 tactgctacg ttagcccggt cttctctcgt cataactggc agcttccggt gcacagttta 240
 cctatcaaag acggtgcgag cgggctgcag gtgtttgcat gcgcgttgct taaaggggac 300
 gtccctgcat gtctacggga cgccaaggat ttccctcgcg tgtcaccatc cgctgtgttg 360
 gggcctggca tgccacgtaa agtgggagac cttcttagca ggatgaagat cgggccgaag 420
 ttagtc 426

<210> 164
 <211> 442
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-048-Q1-K1-H1

<400> 164

ggacgtcagc ctagcaatta gtcacgcgac tccagattgg agaactcgac accatgaagg 60
 tgctgatcgt tgcccttgct ctctggcgcg tcgctgcgag cgccgcctcc agtacaagcg 120
 gcggctgtgg ctgccagaca ccaccgtttc atctaccgcc tccgttctat atgccgcctc 180
 cgttctatct gccgccgag cagcagccgc agccatggca atacccact caaccaccgc 240
 agctaagccc gtgccagcag ttcggatcct gcggcgctcg cagcgctcggc agcccgttcc 300
 tgggccagtg cgtcgagttc ctgaagcacc agtgcagccc ggccggcgacg ccctacgggt 360
 cgccacagtg ccaggcgctg cagcagcagt gctgccacca gatcaggcag gtggagccgc 420
 tgcaccgcta ccaggcgaca ta 442

<210> 165
 <211> 447
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-048-Q1-K1-H10

<400> 165

gacggcatgc atccagacga caaggacgcg taggagacgc tgcgtgcgct gcgcgacatc 60
 ggggccgaga cgggcgcgcg cgagccgatg gccctgaccg gcgacctcgg gtactaggcc 120
 aactgccggg aggtgggtgga gcgggtggcg tcagcgtagc gcgggagcat cgacgtggag 180

gtgaacaacg ctgggggatca gtacgagcgg gagagcatcg gggacgtgac tgaggcggac 240
ctacagcgcg tgttccgcac caacatcttc tctacttac tgggtgtacaa gcacgcggtg 300
ccgcgcatgg agccaggcgc ctgcatcatc aacaccatat tcgtcaacgc gtacaagggc 360
aacatgacgc tgatggacta cacggtcacc aatggcgcca tcgaggcctt cacgcgcgcg 420
ctctcgctgc agctggccga caggggc 447

<210> 166
<211> 371
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-048-Q1-K1-H11

<400> 166

cgcaggcaag tacaagtcga acgcattagc aacgtacagc cacaattgag ggcaggatat 60
tctaactcct tatgctggtt gatatgacta catgcgttgc taaccgcgaca atcttccgtg 120
aatgcgtcac aagctgctat cgcttacgtt gttgccgcat actttggata cattataggt 180
tcagtatgtg aaaaccaga tcttgaacca tatgggctgc aaccagcaat cgtaggaagc 240
aacatacctt tatcgctctt gttgcatgaa caatcaccag acctatTTTT gctgaagcta 300
ttgggtccaaa ccatcagggc acaacatctg caggaacccg tgctacctgg gatcaaccaa 360
gtacttttgg a 371

<210> 167
<211> 280
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-048-Q1-K1-H12

<400> 167

gtcactcata aacatgagtg gcagtgtcag agtgagcaat gacctgaatg aacaatcggg 60
atgaaaagaa taaagaacat aataaataaa aataaaaaaa tagataaaac aaataaaata 120
acataaaaga taaaaaaact gactaaagct tacgtagtta ctaaatacct ataataaaat 180
tatagattca atatataaaa aaggcggacc attaaacata tatcaattat acgtgcgttc 240
gcatgcaact tcatacgtct ataattggtg aagcaaaatc 280

<210> 168
<211> 443
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-048-Q1-K1-H2

<400> 168

gcaacataga aagcacaata gtgtaccaac aatggcagct aaaatatttt gcctccttat 60
gctccttggt ctttctgcaa gtgctgtac cgcgaccatt ttcccacaat gtcacaagc 120
tcctatagct tcccttcttc ccccgtaact ctcaccaacg gtgtcttcgg tatgtgaaaa 180
ccaattctt caaccctaca ggatccaaca ggcaatcgca gctggcatct tacctttatc 240
acccttggtc cttcaacaat catcagccct attacagcag ttacctttgg tgcatttatt 300
ggcacaaaac atcagggcac aacaactaca acaacttggt ctagcaaacc ttgctgccta 360
ctctcagcaa cagcagtttc ttccattcaa ccaactagct gcattgaact ctgcttctta 420
tttgcaacaa caacaactac cat 443

<210> 169
<211> 440
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-048-Q1-K1-H3

<400> 169

gagaccagca agcaacatag aaagtagaat ccattagcaa caatagagca acaatggcga 60
gcaagatatt ttccctcctt atgctccttg ctctttctac atgtgttgct aacgcgacaa 120
ttttccctca atgctcacia gctcctatag cttcccttct tccccatac cttccatcaa 180
ttatagcttc agtatgtgaa aaccagctc ttcaaccata taggcttcaa caagcaatcg 240
cagcaagcaa cataccttta tcgcccttgt tgtttcaaca atcaccagcc ctatctttgg 300
tgcagtcatt ggtacaaaacc atcaaggcac aacagctgca gcaactcgtg ctacctgtga 360
tcaaccaagt agctctggca aacctttctc cctactctca gcatcaacaa tttcttccat 420
tcaaccaact gtctacactg 440

<210> 170
<211> 452
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-048-Q1-K1-H4

<400> 170

cagaaacaca ccaagcgaag cgcactatca acgacctaac aacaatggct accaagatat 60
tagccgtcct tgcgcttctt gccctttttg tgagcgcaac aaatgcgttc attattccac 120
aatgctcact tgctcctagt gccattattc cacagttcct cccaccagtt acttcaatgg 180
gcttcgaaca cctagctgtg caagccaaca tgcaacaaca agcgcttgcg gcgagcgtct 240
tacaacaacc aattgcccaa ttgcaacaac aatccttgcc acatctaaca atacaagcca 300
tcacaacgca acagcaacaa cagttcctac cagcactgag ccacctagcc atgggtgaacc 360
ctgccgccta cttgcaagag cagctgcttg catacaaccc acttgctctg gcgaacgtag 420
ttgcaaacca gcatcaacta cagctacaac ag 452

<210> 171
<211> 331
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-048-Q1-K1-H6

<400> 171

ccgaccact cgtacgaaca acaatcattg gcacatgtaa ccatataaac catagcgacg 60
caacaacggg aacatgagtt gctgatatta ctgagcgacc tagccgagca taaccctgtc 120
atatacttga aacagtaagc tgcttgcata tgaccactt gctctggcaa acgtacctga 180
ttactcgga caacaacaac tgcaacatat tatggccaag atgagtcaac tagccatgg 240
gaaccatgtc gtataactac cacttgctgc atttattcag ctatacgagg gcaatgcaac 300
tacgcacgta cttcgacagt agctgcaaca a 331

<210> 172
<211> 438
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-048-Q1-K1-H7

<400> 172

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agcggcctat tggttttgag tgggaactca taacttacac agatgatact tcatctttag 120
cagaaactga tttggatggt ctgtccagaa ccaagcctaa agaagcaaac gagcttattt 180
ctaagcagga atcgcaggat aagttggaaa aggctcctga tacctctgtg ccaactaatg 240
ggaatagctc ccaagaaaag cttattggca gccagatat actaccaaag aaattggcct 300
taaaattagc atttacttta ccaacatcat gctacgctac aatggctatc cgggagcttc 360
tgaagacttc cacctcagtt gcatatcaga aaacactcag ctgctagatt ctgtttggaa 420
gacattcctt cataagag 438

<210> 173

<211> 412

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-048-Q1-K1-H8

<400> 173

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agctgcttgc attcaaccaa ctgactatgt cgaactctgc tgcgtaccta caacagcgac 180
aacagttact taatccacta gcagtggcta acccattggg cgctgccttg ctacagcagc 240
aacaattgct gccatacaac cagatctctt tgataaaccc tgtattgtcg aggcagcaac 300
ccatcgttgg aggtgccatc ttttagatta catatgagat gtactcgata atgggtgccct 360
cattccggca tgtgtttcct agaaataatc aatatattga ttgagattta tc 412

<210> 174

<211> 237

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-048-Q1-K1-H9

<400> 174

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tacagacagt acctgctatg agttacctag tctagcgcta ctgttctgcg taatcttaat 120
cgctgcctgc attaaacagc ctgactatgc cgaactctac tacatgactg cagcagtgac 180
agaatgtaac tgatgcagta gctacggcta acacattggc cgctgccggt gtacata 237

<210> 175
<211> 381
<212> DNA
<213> Zea mays
<223> Clone ID: LIB3061-048-Q1-K1-G4
<400> 175

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ctgctttctt gcaacaacaa caacaattgc tgccatttta cccacagggt gtgggaaaca 120
ttaacgcctt cttgcaacag caacagttgc taccattcta cccacaggat gtggcaaaca 180
atgtcgcctt cttacaacaa caacaattgc tgccatttaa ccaacttgct ttgacgaatc 240
ctaccacctt attgcagcag cccaccattg gtggtgccat cttctagatt tttttatgct 300
ttatactgta ataataaagt tctcatactg atatgtgcaa cttctcagta ataaaagatt 360
agagatctat attttaagtt c 381

<210> 176
<211> 435
<212> DNA
<213> Zea mays
<223> Clone ID: LIB3061-048-Q1-K1-F12
<400> 176

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ttccctcaat gtcacaagc tctatagct tcccttcttc cccatacct tccatcaatt 180
atagcttcaa tatgtgaaaa cccagctctt caaccatata ggcttcaaca agcaatcgca 240
gcaagcaaca tacctttatc gcccttggtg tttcaacaat cgccagccct atctttgggtg 300
cagtcattgg taaaaccat cagggcacia cagctgcagc aactcgtgct acctctgac 360
aaccaagtag ctctggcaaa ctttcttcc tactctcagc aacaacaatt tcttccattc 420

aaccaactgt ctaca

435

<210> 177

<211> 448

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-048-Q1-K1-F2

<400> 177

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aaaccgcaat tgttcaaccc tacaggatcc aacaggcaat cgcaacaggc atcttaccat 120
tatcacctt gttcctccaa caaccgtcag ccctattaca gcagttacct ttgggtccatt 180
tgggtggcaca aaacatcagg gcacaacaac tacaacaact tgtgctagca aaccttgctg 240
catactctca gcaacatcag tttcttccat tcaaccaact ggctgcattg aactctgctg 300
cttatttgca acaacaatta ccattcagcc agctagtgtg tgccctacccc cagcaatttc 360
ttccattcaa ccaactagca gcattgaact ctgctgctta ttacagcag caacaactac 420
taccattcag ccagctagct gatgtgag 448

<210> 178

<211> 444

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-048-Q1-K1-F3

<400> 178

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ttcgtgggtg agcggatcga gatggcggcg tcggatgttg agtaccgctg cttcgtcggc 120
ggcctgcct gggccacgga cgaccactcc ctccacaacg ccttcagcac ctacggcgag 180
gtcctcgagt ccaagatcat cctcgatcgt gagacgcaga ggtcccgcgg cttcggcttc 240
gtcaccttct ccacggagga ggcgatgcgg aacgccatcg agggcatgaa cggcaaggag 300
ctggacggcc gcaacatcac cgtcaacgag gccagtcctc gcggcgggcg tggaggcggc 360
ggctgctgcg ggtacggtgg tggccgtgga ggcggcggtc acggcggtgg cgggcgcctg 420
gatggcggcg gcggctactg cggg 444

<210> 179
 <211> 444
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB3061-048-Q1-K1-F4

 <400> 179

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atgccactac cctactcaac cgccccggcc tcagcctcat ccccagccac acccatgccc 180
gtgccaacag ccgcatccaa gcccgtgcc a gctgcaggga acctgcggcg ttggcagcac 240
cccgatcctg ggccagtgcg tcgagttcct gaggcattcag tgcagcccga cggcgacgcc 300
ctactgctcg cctcagtgcc agtcgttgcg gcagcagtg tgcagcagc tcaggcaggt 360
ggagccgcag caccggtacc aggcgatctt cggcttggtc ctncagtcca tcctgcagca 420
gcagccgcaa agcggccagg tcgc 444
  
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<210> 180
 <211> 437
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3061-048-Q1-K1-F5

 <400> 180

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tactgatata acattcaat cctcctacc tgttacttca acggtcttcg accacttaca 180
tgtgcatgcg taaaccctac agcatccgct agcgccctagc agtctgacat cttccaatta 240
cccatttcca acatcaatca ctgacacatg caaatataaa cattatcacc acagcacagc 300
aacagcaaca actactagta ccaacactgc tacatctaga tgctcttaac ctttacttct 360
acctgcaaca gcatgcgctt agattaatcg cacttgctat ggcaaacgta actgcattac 420
caacaacaac tgcaatt 437
  
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<210> 181
<211> 458
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-048-Q1-K1-F6

<400> 181

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cttggctacc aagatattaa ccctgcttgc gcgtgctgct ttatcagtct gcgcgtcata 120
tgctccatc aatccacaat gaacacttgc tcacagtgat attataccaa aattcctccg 180
acctgttact acaacggtct tcgaacaccg agctgcccac gtttacaggc tacaacatac 240
gacatcgact agcatcttac atcatccaat tatcccactg caacatcaat ctttgacaca 300
tcttactata caaaccaact acacacaata tctagaacca acactaccag ccatgacacc 360
tctagatgtg gtaaaccctg aatattactt gcaacatcaa gtgctagcat tcaaccaaca 420
gtgatctatc taacgtaact gcataccatc aactacat 458

<210> 182
<211> 441
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-048-Q1-K1-F7

<400> 182

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ctccttatgc tccttggctc ttctgcaagt gctgctacgg cgaccatttt cccgcaatgc 120
tcgcaagctc ctatagcttc ccttcttccc ccgtacctct caccagcggg gtcttcggta 180
tgtgaaaacc caattcttca accctacagg atccaacagg caatcacagc tggcatctta 240
cctttatcac ccttggttct ccaacaatca tcagccctat tacatcagtt acctttgggtg 300
catttattgg cacaaaacat cagggcacaa caactacaac aacttggtgt agcaaaccctt 360
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gcttcttatt tgcaacaaca c 441

<210> 183

<211> 442
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3061-048-Q1-K1-F8

 <400> 183

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 tgctcggcgc cgtcgccgcc gcgctcgtgc tcaggctcgc caccggaggg atgcatctgc 120
 cggagtagcg gctggccggg ggctgagcg gatggaacgc ggcggtgctg gaggcggcca 180
 tggcgttcgg gctcatgtac gcctactttg cgacggtgat ggacaaagcg cggaggggtcc 240
 gcgccggcgc cggagcgctg gcggcgccgc tcgccgtggg gtccttggcg ggggccaacg 300
 tgctggcctg cggcgcgctg gagggcgccg tgatgaatcc ggcgcgcgcg ttcgggcccg 360
 ccgtcgtggg ctcccgtcgc tggagacacc aatgggtgta ctgggtgggg cccatggtcg 420
 gcgccggcct ctccggcatc gt 442

<210> 184
 <211> 361
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3061-048-Q1-K1-F9

 <400> 184

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 gaccctcgat gcggtgataa gagtcaaact aggaaaagct cttctaatacc ttcttattct 120
 aaggcaccca ttgcacgggt ccctgatccc tatctacttg attgctcttt gaacaatggt 180
 tatgctggct ccaataagaa aaaagccgaa aagagcaggt tccgaccatt tgccatggaa 240
 accccatcac tctgaggact caaatgagaa gaaaaaaact cagaatgcat caaaccaaca 300
 ttctgtcaaa acggatattg acgaagaatc acatgaacgt gtgcaacctc aaagggttgg 360
 c 361

<210> 185
 <211> 391
 <212> DNA
 <213> Zea. mays

<223> Clone ID: LIB3061-048-Q1-K1-G10

<400> 185

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gcgccgcctc cacggcatac aagcgggggc tgctgctgcc agccaccgcc gacggttcat 120
ataccgtcgt aggtgcatct gtcacctccg gtacacctgc acacctgcgg tgcattcttc 180
accgacggtc caactgccga cgctgcacg actgacaacg ccggtgcatg tgccgtcgca 240
cggatcatct gccgtcgtca ccatgccact accatactta acacggccgg cctcagtcctg 300
ataccagcc acacacatgc tcatgccaac agacgtatac caaccgtgc cagctgcacg 360
gaacctgcag tgtcagcagc accccgatcc t 391

<210> 186

<211> 425

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-048-Q1-K1-G11

<400> 186

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gctccttggt ctttctgcaa gtgtgctac ggcgaccatt ttcccgcaat gctcgcaagc 120
tcctatagct tcccttcttc ccccgtaact ctcaccagcg gtgtcttcag tatgtgaaaa 180
cccaattctt caaccctaca ggatccaaca ggcaatcgca gctggcatct tacctttatc 240
acccttggtc ctccaacaat catcagccct attacaacag ttacctttgg tgcattttatt 300
ggcacaaaac atcagggcac atcaactaca acaacttggt ctagcaaacc ttgctgccta 360
ctctcagcaa cagcagtttc ttccattcaa ccaactaggt tcattgaact ctgcttctta 420
tttgc 425

<210> 187

<211> 402

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-048-Q1-K1-G12

<400> 187

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 tgcaatgcag atgcctgcc cctgcgcggg gctgcagggc ttgtacggcg ctggcgccgg 180
 cctgacgacg atgatgggcg cggcggggt gtacccctac gcggagtacc tgaggcagcc 240
 gcagtgcagc ccgctggcgg cggcgcccta ctacgccggg tgtgggcaga cgagcgccat 300
 gtaccagccg ctccggcaac agtgctgcca gcagcagatg aagatgatgg acgtgcagtc 360
 cgtcgcgcag cagctgcaga tgatgatgca gcttgagcgt gc 402

<210> 188
 <211> 426
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-048-Q1-K1-G2

<400> 188

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 tcttacctca gatgcttgct ctgaaactct tcattctcaa acacagtcct ctaggaaaaa 120
 ttatgctgat gcaaaccgtg tatctgctat cattttgggc ggaggcactg gatctcagct 180
 ctttcctctg acaagcacia gagctacgcc tgctgtacct gttggaggat gttacaggct 240
 tattgatatc cctatgagta actgcttcaa cagtgggtata aataagatat ttgtgatgag 300
 tcagttcaat tctacttcgc ttaaccgcca tattcatcgt acataccttg aaggcgggat 360
 caactttgct gatggatctg tacagggtatt agcggctaca caaatgcctg aagagccagc 420
 tggatg 426

<210> 189
 <211> 417
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-048-Q1-K1-F11

<400> 189

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tagcagatac tactaccatt tggccagata gctacgtcat gcaccacttc cactatgaaa 180
 caacaacatt cgattacgtt ctaccatcag tctgtggcta acaccgcaac agtattacaa 240
 ctgctacaac tgctgccctt tgtccaactt gctttgacat agcccgcatg cttgtaccaa 300
 catcacatga tcgtcggcgt catctttcaa atggattata acctggaatt caataatgaa 360
 ggagctcggc tgctgaatgt ggcctactta aaataacaac tatcagatgc atatgct 417

<210> 190
 <211> 422
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-048-Q1-K1-D8

<400> 190

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 ttgaagggtg ctcatgtcac gatgaacgta cagaccataa gtcagacttt gatgtctctg 180
 atgatgataa gacgacaaga ataagctctt tgaagaaaaa agcaatagat gcatcaacga 240
 agattaggca ctcatataaa aagactagac ggaagagcgg tagtagggtc ctttctgcgt 300
 ctattgagga tgtgcgcgat ctacaggagc tgcaagctgt tgaagcattt atacaagcat 360
 tactcttgga tgagctgttg cctgcaaggc atgacgacta tcatatgacg ctgagatttc 420
 tg 422

<210> 191
 <211> 414
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-048-Q1-K1-D9

<400> 191

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 tgaaccctgc cttgcagcaa cccatcggtg gaggtgccat cttttagatt acatatgaga 180
 tgtactcgac aatggtgccc tcataccgac atgtgtttcc tagaaataat caatatattg 240

attgagattc atctcgaaaa actaatacag caattacctt agaaggataa attggcacia 300
aacaataagg cacaacaact acaacaactt gtgctagcaa accttgctga ctactctcaa 360
gaaacagcaa attaataaat ggggggccct ttttaaggaat caaactttac ttcc 414

<210> 192
<211> 408
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-048-Q1-K1-E10

<400> 192

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ccagatttag cccttctggc taattgcact ttatgcgagc ccatcatagc gtacacttat 120
tgaacaatgc tgaattgtcc taaagccaga ttgccaaatg cttgaccagg gacttaagga 180
tatgaagacc tattgccaag ccatcatgca gcaaaagcgc ttgtgagagc gtcttacaac 240
aacaattgcc caattgacac acaatgattg ccacatataa caatacaaag gataacgacg 300
taacaataac aacctttcgt acatcattga gccacctagg catggtgaac cctgatccct 360
actcgcgaga gctgctgcta gcatgcaacg cacttgctct ggagaacg 408

<210> 193
<211> 321
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-048-Q1-K1-E11

<400> 193

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gatattttgc ctcttatgc tccttggctt ttctgaaagt gctgctacgg tgaccatttt 120
cccacaatgc tcacatgctt ctatagcttc ccttattacc ccgttcctct caccagcggg 180
gtcttcggta tgtgaaatcc caattcttca accctatagg atccaacatg gtaactacac 240
aagcattgaa ccttattcaa tcctgcaggc tatcacatct ggcatcttac ctccataact 300
cgtgttgctg catcaatcgt c 321

<210> 194

<211> 322
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3061-048-Q1-K1-E12

 <400> 194

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 gacaggagct cgctcgctcg caaatccgca atggcgctcca tcatcggtgca ggcggtggtg 120
 atcctcctgg acgtgatcgc cttcggcctg ggcgctcgccg ccgagcagcg ccggagccgg 180
 tccaccgtca ccccgagcgc cgccaaggag tacgactact gcgtctacga ctccgacatc 240
 gccacggggg acggcgctcg cgcgctgctc ctccctcgccg ccgcgagcaggt ggtgctcatg 300
 gtcgccagcc gctgcttctg ct 322

<210> 195
 <211> 436
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3061-048-Q1-K1-E2

 <400> 195

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 ggtgggcaat gcacctacgt acctacaaca acagctgctg caacaaattg taccagctct 180
 gactcaacta gctggggcaa accctgctgc ctacttacia cagttgcttt cattcaacca 240
 actggctgtg tcaaactctg ctgcgtacct acgacatgcg acacagttac ttaatccatt 300
 ggcagcggct aaccattga tcgctacctt cctgcagcag caacatcaat tgctgccata 360
 caaccagttc tctttgatga accctgccgt gcagcaaccc atcgttggag gtgccatctt 420
 ttagattaca tatgag 436

<210> 196
 <211> 442
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3061-048-Q1-K1-E3

<400> 196

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caatgctcac aagctcctat agcttccttt cttcccccat acctctcacc agcggtgtct 180
tcagtatgtg aaaaccaat tcttcaaccc tacaggatcc aacaggcaat cgcagcaggc 240
atcttacctt tatcaccctt gttcctacaa caaccgtcag ccctattaca gcagttacct 300
ttggtgcatt tgttggcaca aaacatcaaa gcacaacaac tacaacaact tgtgctagga 360
aaccttgctg cctactctca gcaacagcag tttcttccat tcaaccaact ggctgcattg 420
aactctgctg cttatttgca ac 442

<210> 197

<211> 445

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-048-Q1-K1-E4

<400> 197

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tgagccctcc ttgcgcttct tgccctttta gtgagcgcaa caaatgcgtt cattattcca 120
cagtgtcac ttgctcctag tgccattatt ccacagttcc tcccaccagt tacttcaatg 180
ggcttcgaac atccagccgt gcaagcctac aggctacaac tagcgcttgc ggcgagcgcc 240
ttacaacaac caattgcca attgcaacaa caatccttgg cacatctaac cctacaaacc 300
attgcaacgc aacaacaaca acaacaacag tttctgccat cactgagcca cctagccgtg 360
gtgaaccctg tcacctactt gcaacagcag ctgcttgcac ccaaccact tgctctggcg 420
aacgtagctg cataccagca acaac 445

<210> 198

<211> 442

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-048-Q1-K1-E5

<400> 198

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 ccgggcagct tgctggtcaa agctgggtcg gtgggcaaaa gctgttgagg actgcagcga 120
 ggccctaaga gtccagccta actacacaaa ggctctgcta aggcgtgcgg cgatcatatgc 180
 aaagcttgag cgctgggcgg actgtgtgcg ggactacgag gtgcttcgca aggatcttcc 240
 tggtgacact gaggttgag agtccttggt ccatgcccac gttgcattaa agacagcccg 300
 tggagaggtg gtatctaata tgaagtttgg aggggtagtt gaagaaatta tcagcttaga 360
 gcaactccaa gatgttatcc gttcacctgg tgtatccgtt ctttacttca tggctacaat 420
 gaacaagcaa tgtgcacaaa tt 442

<210> 199
 <211> 430
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-048-Q1-K1-E6
 <400> 199

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 ccatcagcgt agtgtgtgga aatcacatga gtgccagatg actagaatga acgaaaagat 120
 tgatgagttg aagtcacaga tggaggagct gaaagcagac ttgaacaaag caaagaaagg 180
 gaagcctcta tgctatgatt cataggggaa gccaaagagg aacttggtc ctgaagcgat 240
 tcaaaagaag gttgcaacac ttgaaggcaa gatagagaag atggagatgg ataagaggat 300
 aaaagaggat ctgaagacag ttgcgctggg aacgtcaaag atcaactatc ttgatcctag 360
 aataaccgtg gcatggtgca aacgccatga agtccttatt gagaagattt tcaacatata 420
 tgcctcgcg 430

<210> 200
 <211> 437
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-048-Q1-K1-E7
 <400> 200

accaacttcc attccctacc gcccgccac ccaactccac tccgctctc ccaactcgagc 60

catcatggcc ctcgcctccc gcgcgcgcgc agccgccgtg gcgtgcgtcc tcttggcgct 120
cgccgcctcc gccgcggggg cgggctccaa ctcccctgca ccggcgccgg cggtggactg 180
tatctcccag gccgccagcc tgatcgactg catcgactac gtccagaagg ggagcagcgc 240
gcgcgcgtccg tccgctgcct gctgcggcga ggtcaagacc gcagtggcca gccccgtcat 300
cgtgggctgc ctctgctccc tcgccggctc caactccagt aacctgggct tccccatcga 360
catgaagcgc gtgctggcgc tccccggcgc gtgcggcgcg tccaacgccg tcttcagcaa 420
gtgcaacatt ttcgcgc 437

<210> 201
<211> 406
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-048-Q1-K1-E9

<400> 201

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cctccttatg ctccctgctc tttctgcatg tgttgctaac gcgacaattt tccctcaatg 120
ctcacaagct cctatagctt ccttcttcc ccatacctt ccatcaatga tagcttcagt 180
atgtgaaaac ccagctcttc aaccctatag gctccaacaa gcaatcgag caagcaacat 240
acctttatca ccctagtctc aacaatcgcc agccctatct ttggtgcagt catttggtaca 300
aaccatcaag gcacagcagc tgcagcaact cgtgctacct gtgatcaacc aagtagctct 360
ggcaaaccct tctccttact atcagcaaca acaatttctt ccattc 406

<210> 202
<211> 454
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-048-Q1-K1-F1

<400> 202

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ctaccaagat attaggcctc cttgcgcttc ttgccctttt tgtgagcgca acaaatgcgt 120
tcattattcc acaatgctca cttgctccta gtgccattat accacagttc ctccgaccag 180

ttacttcaat gggcttcgaa cacctagctg tgcaagccta caggctacaa caagcgcttg 240
 cggcgagcgt cttacaacaa ccaattaacc aattgcaaca acaatccttg gcacatctaa 300
 ccatacaaac catcgcaaca caacagcaac aacagttcct accagcactg agccaactag 360
 atgtggtgaa ccctgtcgcc tacttgcaac agcagggtgct tgcattcaac ccacttgctc 420
 tggcaaacgt agctgcatac caacaacaac aaca 454

<210> 203
 <211> 435
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-048-Q1-K1-F10

<400> 203

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 taattctgct cgtgagggga tggatgaaaa agattggcta tcacttggtg cagtccatag 120
 tgatcctggg ctaagggtctg ttgcatttaa ttttgaacca aggttggaat ccaataaaga 180
 ttccaggaac cgtcttttaa ccatgaccat taaccttccc agcttatatg aggttgtcac 240
 aggaacagcc aagaaagagc ccaaagaaaa aactcctaaa agcaacatta agactaacia 300
 atctgggtca aagccctcgc gccatgcgga acccaactca aggggtcccaa agatgccacc 360
 tccaaaggac gaggagagtg aagaggagga aggggaacca caggaagacc aggagagtgc 420
 gctgtgtggc gcatg 435

<210> 204
 <211> 437
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-048-Q1-K1-D6

<400> 204

gaccaactag caacatagaa agcacaatat tgtaccaaca atggcagcca aaatatttgg 60
 ctctcttatg ctctttggtc tttctgcaag tgctgctacc gcaaccattt tcccacaatg 120
 ctcaaaagct cctatagctc tctttcttcc ccataacctc tcaccagcgg agtcttcagt 180
 atgtgaaaac ccaattcttc aaccctacag gatccaacag gcaatcgcag cagcatctt 240

acctttatca cccttggtcc tccaacaacc gtcagcccta ttacagcagt tacctttggt 300
gcatttggtg gcacacaaca tcaaggctca acaactacaa caacttgtgc tacgaaacct 360
tgctgcctac tctcagcaac agcagattct tccattcaac caactggctg cattgaactc 420
tgctgcttat ttgcaac 437

<210> 205
<211> 443
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-048-Q1-K1-C2

<400> 205

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ttttgcttcc ttatgctcct tggctcttct gcaagtgttg ctaccgcaac cattttccca 120
caatgctcac aagctcctat agcttcctt cttcccccat acctctcacc agcgggtgtct 180
tcaatgtgtg aaacccaat tgttcaacct tacaggatcc aacaggcaat cgcaacaggc 240
atcttaccat tatcaccctt gttcctccaa caaccgtcag ccctattaca gcagttacct 300
ttgggtccatt tgggtggcaca aaacatcagg gcacaacatc tacaacaact tgtgctagca 360
aaccttgctg catactctca gcaacatcag tttcttccat tcaaccaact ggctgcattg 420
aactctgctg cttatttgca aca 443

<210> 206
<211> 411
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-048-Q1-K1-C3

<400> 206

aagaaacaga ggccaaggct aactcaggaa ctagaagcat tctggacaat ggatgagcga 60
gctacgagac tcaagttagg gatcacatct gatgctcatg cagataaatt gagacacctg 120
atagatctct tctaccagtg taccagagga catgcatcca ggcgccccaa agctgtgcaa 180
atttacaact cactgtgctc cttgcccaca tggttacgaca tgaggtgaac gttctgatac 240
tgtatgaacg cgaaacttga tgcagaagtg caggggaaga aggtcaaggc aggacatcta 300

gccagcctca gaggggttgg tgctctaacc cgaacatttc accgtgagtt ggccttcagg 360
tgctgccagg cagaacatga gaagtgggac caaggctagc ggctgtggtc g 411

<210> 207
<211> 417
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-048-Q1-K1-C4

<400> 207

ggcatgccag aaacagagat agacctgac gcagtgtatg ggcacctcgc cgctatgaca 60
aatctgcgcc tgggggtgtt tcacatgcct tgcgtcaga tttttctcaa atgcagtcac 120
attctggaga taatgtctca caactaacag atgggtcatgg agacagaaag acagacacaa 180
gggggtcatgg aggtagccgt ggtgttcctg ttgaaaatgg acataggcat gccaacccgtc 240
gtggtacccc atgtgatcca aaggaaacca aaatatctgc tagcgtgcct gatggaaaga 300
attcaaagag gggctctgct agctatgggt ctcagtgcag acaagtatgg gttcagaagt 360
caagttcagg ctctgtgagtt tgtccattga tgatactccc ataaaaaaca ggtattg 417

<210> 208
<211> 408
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-048-Q1-K1-C5

<400> 208

cggcgggacc cactcgtccg gagatcaaag gcctttgcat gaagttatat ttgcatgtga 60
cgataagcca aaggttatgg gacagttaac ctgtgtcctg ggggagcttg gtcttaatat 120
ccaagaagca catgcatatt cgacgagtga tggctattcc ttggacatgt ttgttgttga 180
cggctgtgag tatgaggctg acattctcca aagcgcattg acagaaggcg ttgataaaat 240
aaagtacaga gcatggccgt tggtagcgtc gatgactgct aagatggatc accaaccatt 300
ggaggtttat ccttcatcta gactttggcc agataccagc tgatgcagct gatgttcggg 360
aagtcgatct caggattgtc aaattcgaac aatattttatc ggctggat 408

<210> 209

<211> 432
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3061-048-Q1-K1-C6

 <400> 209

 gcaacataga aagtggaata cagtagcaac aatagagcaa caatggcggc caagatatgg 60
 tccatcctta tgctccttgc tctttctgca tgtgttgcta acgcgaccat ttttcctcaa 120
 tactcacaag ctccatatagc tgcccttctt ccccatatac ttccatcaat gaccgcttca 180
 gtttgtgaaa acccagccct tcaaccctac aggctccaac aagcaatcgc aacaagcaac 240
 ttacctttat caccctgtt ctttcaacaa tcgccagccc tatctttggt gcagtcattg 300
 gtacaaacca tcatggcaca acagctgcaa caactcgtgc taccagtgat cagccaagta 360
 gctctggcaa acctttctcc ctactctcag caacaacaat ttcttccatt caaccaactg 420
 tctacactga ac 432

<210> 210
 <211> 404
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3061-048-Q1-K1-C7

 <400> 210

 aacatagaaa gcgcaatagt gtaccaacac tggcagccaa catattttgc ctgcttatgc 60
 tccatggtat ttctgcaagc gctgctacgg cgaccatttt accgcaatgc tcacaagctc 120
 ctatagcttg ccttcatccc tcgtacctct caccagcggg gtctatggta tgcgaaaacc 180
 caattcttca accctacagg atccaactgg caattgcagc tggcatctta cctttatcac 240
 cctcgttcat ccaacaatca tcagccctat tacagcagtt acctttggtg catttattgg 300
 cacaaaacat taaggcacia caactacaac aacttgtgct agcaaaccct gatgcctact 360
 ctcagcaaca gcagtttctt ccattcaacc aactagctgc attg 404

<210> 211
 <211> 429
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-048-Q1-K1-C8

<400> 211

cccacgcgtc cgcaacaagc aacatagaaa gtggaataca gtagcaacaa tagagcaacg 60
gtggcggcca agatattttc catccttatg ctccttgctc tttctgcatg tgttgctaac 120
gcgaccattt ttcctcaata ctacaagct cctatagctg cccttcttcc ccatacctt 180
ccatcaatga ccgcttcagt ttgtgaaaac ccagcccttc aaccctacag gctccaacaa 240
gcaatcgcaa caagcaactt acctttatca cccctgttct ttcaacaatc gccagcccta 300
tctttgggtc agtcattggt acaaaccatc agggcacaac agctgcaaca actcgtgcta 360
ccagtgatca gccaagtagc tctggcaaac ctttctccct actctcagca acaacaattt 420
cttccattc 429

<210> 212

<211> 362

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-048-Q1-K1-C9

<400> 212

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gggccaaaact caagctacca gccctagctt acgctaccag ctaactctgc agctctccct 120
ctctcatccc taactccttt atactggccc tctcactc aatgaccttc ctgcgacatc 180
ccctccatta ctgacctcta ccgtctgcca caacctaccc cttctgccat ccaggctact 240
tccctcactt ccatacgcga tcgaacttcc atattccctg gccttccatc tgtcgactgc 300
accacaccct gcactgccat accaacagtc catcaacgtg cagcatctgg cgctcctccc 360
tc 362

<210> 213

<211> 445

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-048-Q1-K1-D1

<400> 213

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 gttttgggttc cttatgctcc ttggtctttc tgcaagtgtt gctaccgcaa ccattttccc 120
 acaatgctca caagctccta tagcttcctt tcttccccca tacctctcac cagcgggtgtc 180
 ttcaatgtgt gaaaccccaa ttgttcaacc ctacaggatc caacaggcaa tcgcaacagg 240
 catcttacca ttatcacctt tgttctcca acaaccgtca gccctattac agcagttacc 300
 tttgggtccat ttggtggcac aaaacatcag ggcacaacaa ctacaacaac ttgtgctagc 360
 aaaccttgct gcatactctc agcaacatca gtttcttcca ttcaaccaac tggctgcatt 420
 gaactctgct gcttatttgc aacaa 445

<210> 214
 <211> 418
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-048-Q1-K1-D10
 <400> 214

cagaaacaca ccaagcgaag cgcactagca acaacctaac aacaatggct accaagatag 60
 gatcccgctt tgcgcttctt gcgctttttg cgagcgcaac aaatgcgtcc attattccac 120
 aatgctcact tgctcctagt tccattattc cacagttcct cccaccagtt acttcaatgg 180
 ccttcgaaca ccagctgtg caagcctata ggctacaaca agcgattgcg gcgagcgtct 240
 tacaacaacc aattgcccaa ttgcaacaac aatccttggc acatctaaca atacaaacca 300
 tcgcaacgca acagcaacaa cagttcctac cagcactgag ccacctagcc atgggtgaacc 360
 ctgtcgcccta cttgcaacag cagctgcttg catgcaaccc acttgctcta gcaaacgt 418

<210> 215
 <211> 425
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-048-Q1-K1-D11
 <400> 215

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 ctttatcacc cttgttgttt caacaatcgc cagccctatc tttggtgcag tcattggtac 120

aaaccatcag ggcacagcat ctgcagcaac tcgtgctacc tgtgatcaac caagtagctc 180
 tggcaaacct ttctccctac tctcagcaac aacaatttct tccattcaac caactgtcta 240
 cactgaaccc tgctgcttat ttgcagcaac aactattacc attcagccag ctagctactg 300
 cctactctca gcaacaacaa cttcttacat ttaaccaatt ggccgcactg aaccccgctg 360
 cttatttgca gcagcaaata ctactaccat ttagccagct agctgcagca aaccgtgctt 420
 ccttc 425

<210> 216

<211> 399

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-048-Q1-K1-D12

<400> 216

cgcacagtag tgtgtcccc ctccccctgc tagggctctg attcttttta ttgacgatca 60
 agtacggagg ttctatcggg gccacaagc tcgacccgcg accgaaggta caagagacgc 120
 tgatgttcag gctcttcac cgcgcgtaga aaggatggcg gcagcggcag acctactcgg 180
 cgtcagttgc gttgtctact gcgaattttt gtctggtgat ccatactttc gagtgcattc 240
 ccgtgccgga agcgggtccc tctaacgact tcgtcacgcc gactgaggcc gacctgttag 300
 atccctccat cgaggctcct actgagatga ctccggtcgc gaagaggagc ccagttgagc 360
 tccttcgcgt gttctacgtc aaattcaaga aggatctgt 399

<210> 217

<211> 447

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-048-Q1-K1-D2

<400> 217

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 ttttggttcc ttatgctcct tgggtcttct gcaagtgttg ctaccgcaac cattttccca 120
 caatgctcac aagctcctat agcttccctt cttcccccat acctctcacc agcgggtgtct 180
 tcaatgtgtg aaacccaat tgttcaaccc tacaggatcc aacaggcaat cgcaacaggc 240

atcttaccat tatcaccctt gttcctccaa caaccgtcag ccctattaca gcagttacct 300
 ttgggtccatt tgggtggcaca aaacatcagg gcacaacaac tacaacaact tgtgctagca 360
 aaccttgctg catactctca gcaacatcag tttcttccat tcaaccaact ggctgcattg 420
 aactctgctg cttatttgca acaacaa 447

<210> 218
 <211> 447
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-048-Q1-K1-D3

<400> 218

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 ctaactgcaa aaaccatgaa gctgggtgctt gtgggttcttg ctttcattgc tttagtatca 120
 agtggtttctt gtacacagac aggcgggtgc agctgtggtc aacaacaaag ccatgagcag 180
 caacatcatc cacaacaaca tcattccaaa aaacaacaac atcaaccacc accacaacat 240
 caccagcagc agcaacacca acaacatcaa gttcacatgc aaccacaaaa acatcagcaa 300
 caacaagaag ttcatgttca acaacatcaa caacaaccgc agcaccacca ccaacaacaa 360
 caacaacagc accaacaaca acatcaatgt gaaggccaac atcaacatca ccaacaatca 420
 caaggccatg tgcaacatca cgaacag 447

<210> 219
 <211> 408
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB3061-048-Q1-K1-D4

<400> 219

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 cttccacctg ctgcacgaag gtggctgtct gcgttgtgtg ctggcgatgc agatctgaaa 120
 ttctaagct aagcagtttt tggatgtgtc ggcatagact gtcttttgtt ttggaactag 180
 aattcctttt tgcctcgtaa ggccctggacc cactgtataa tgctatgttg ctttggatgg 240
 ctgacgatgg ttaccgctgt gttgctagcc atgtgggtact tgatctgtat caccggttgca 300

aataagtgct gtttctaaaa aaaaaaacnn caacaacata aacaacaata gcttcaacaa 360
 caacaactcc tactacaaca tcactgtata agcccacatc atcataac 408

<210> 220
 <211> 434
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-048-Q1-K1-C12

<400> 220

gaaagcacia tagtgtacca acaatggcag ccaaaatatt ttgcctcctt atgctccttg 60
 gtctttctgc aagtgtgct acggcgacca ttttcccgca atgctcgcaa gctcctatag 120
 cttcccttct tccccgtac ctctcaccag cggtgtcttc ggtatgtgaa aaccaattc 180
 ttcaacccta caggatccaa caggcaatca cagctggcat cttaccttta tcacccttgt 240
 tcctccaaca atcatcagcc ctattacatc agttaccttt ggtgcattta ttggcacaaa 300
 acatcagggc acaacaacta caacaacttg tgctagcaaa ccttgctgcc tactctcagc 360
 aacagcagtt tcttccattc aaccaactag ctgcattgaa ctctgcttct tatttgcaac 420
 aacaacaact acca 434

<210> 221
 <211> 389
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-044-Q1-K1-G4

<400> 221

cccacgcgtc cggcaaagcg gcagtgcgta gagaggatcg tcgaacagaa cagcatgaag 60
 atggtcatcg ttctcgtcgt gtgcctggct ctgtcagctg ccagcgctc tgcaatgcag 120
 atgccctgcc cctgcgcggg gctgcagggc ttgtacggcg ctggcgccgg cctgacgacg 180
 atgatgggcy ccggcgggct gtacccttac gcggagtacc tgaggcagcc gcagtgcagc 240
 ccgctggcgg cggcgcccta ctacgccggg tgtgggcagc cgagcgccat gttccagccg 300
 ctccggcaac agtgtgtcca gcagcagatg aggatgatgg acgtgcagtc cgtcgcgcag 360
 cagctgcaga tgatgatgca gcttgagcg 389

<210> 222
 <211> 342
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-044-Q1-K1-G5

<400> 222

gcattcagaa acacaccaag cgaagcgcac tatcaacgac ctaacaacaa tggctaccgg 60
 gatattagcc ctcccttgccg ttcttgccct ttctgtgagc gcaacaaatg cggttcattat 120
 tccacaatgc tcaattgctc ctagtgccat tattccacag ttctctccac cagttacttc 180
 aatgggcttc gaacacctag ctgtgcaagc caacatgcaa caacaagcgc ttgcggcgag 240
 cgtcttataa caaccaattg cccaattgca acagcaatcc ttgccacatc taacaatata 300
 agccatcaca acgcaacagc aacaacagtt tctaccagca ct 342

<210> 223
 <211> 283
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-044-Q1-K1-G6

<400> 223

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 gcttggaag aagtttgcaa ccggagcttc tgttgtaag ggccctacgg agaaggagca 120
 aatcgacgta caaggggaca tctcatatga tattgtggag ttcattacag atacatggcc 180
 tgatgtacct gagtcggcca ttttcttcat tgaagatgga aggaagggtc ctgctgcttg 240
 atgccatag ttttataagg cacgagacca atggatttac aaa 283

<210> 224
 <211> 135
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB3061-044-Q1-K1-G7

<400> 224

cccacgcgtc cgatttgcaa caacaacaac taccattcag ccagctacct gctgcctacg 60
 cccagcaat ttcttccatt caaccaaagtg gtagtaagtt gttgnntgct gtnnataagc 120
 aggagagtgc agtgc 135

<210> 225
 <211> 389
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB3061-044-Q1-K1-G8
 <400> 225

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 gctcgttgcc ctcgctctcc tggctctcgc tgcgagcgcc acctccacgc atacaagcgg 120
 cggctgcggc tgccagccac cgccgccggt tcatctaccg ccgcccgtgc atctgccacc 180
 tccggttcac ctgccacctc cgggtgcatct cccaccgccc gtccacctgc cgccgcccgt 240
 ccacctgcca ccgcccgtcc atgtgccgtc gccggttcac ctgccgtcgt caccatgcca 300
 ctaccctact caaccgcccc ggcttcagcc tcatccccag ccacacccat gncngtgcca 360
 acagccgcat ccaagcccgt gccagctgc 389

<210> 226
 <211> 417
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-044-Q1-K1-G9
 <400> 226

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 gcttgcgttc ttccccata ccttccatca atgatagctt cagtatgtga aaaccagct 120
 cttcagccct ataggctcca acaagcaatc gcagcaagca acataccttt atcacccttg 180
 ttgttttaac aatcgccagc cctatctttg gtgcagtcac tgggtacaaac catcagggca 240
 cagcagctgc agcaactcgt gctacctgtg atcaaccaag tagctctggc aaacctttct 300
 ccctactctc agcaacaaca atttcttcca ttcaaccaac tgtctacact gaacctgtct 360
 gcttatttgc agcaacaact attaccattc agccagctag ctactgccta ctctcag 417

<210> 227
 <211> 338
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-044-Q1-K1-H1

<400> 227

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 ctactagcac attatgcatg cgtggccaac gcgacatttt tgcgtgcgcg ctactgcct 120
 ccaatagctc acattgctca ctcacaccta gcatcaatgt tcgatacagt atgtgaaaac 180
 ctacttctat aaccctataa gatccaacta gcaatggcta catgctacat accgcgatca 240
 ccgttggcgc aacaatcgat agacctatct aagggtgact ccttggcaca gaccatctag 300
 gcacaccaac tgtagcaact catgctacac gagatcaa 338

<210> 228
 <211> 426
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-044-Q1-K1-H10

<400> 228

cgcgtagcgt gatagccgag accaagacca tatccttcca cttgctatgg cggcggcggc 60
 ggcgacggcg accgcgacct ctccggcgag ggcttcgtgg cggcctacgg ttcccgcgac 120
 ctccggcatcg gcagcaggag tctgcttccg tggttgagcg aagcgctttc cagggtccg 180
 aacggcaagc acctgtcggc accgacaccg aggcagaaca aggtcacaa cagctcacgt 240
 caagagcggg gaagccgagg ggcgtccaag cacggaggag agcgcaactg gcatcggcgg 300
 cccggacgag gactccttgc ggcgcgagct cgaaaccgcg atcgaggagg aggactacgc 360
 gcgcgccgcg gcgctccggg acgagctgcg cgtgtccag gaggactgcc gggcccgcg 420
 gctggc 426

<210> 229
 <211> 412
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-044-Q1-K1-H11

<400> 229

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tctagcagca gccaccgtcg cctcatcctc gcagccgtcg tcttgccttc cgtgctcgcg 120
gctgccagcg ccagcgccgg gacctcctgc gtgccggggg gggccatccc gcacaaccgg 180
ctcccagact gccgctggta cgtgaccagc cggacctgcg gcacgcccgc gcgcctcccg 240
tggccggagc tgaagaggag atgctgccgg gagctggcgg acatcccggc gtactgccgg 300
tgcacggcgc tgagcatcct catggacggc gcgatcccgc cgggcccggg cgcgagctg 360
gagggccggc tagaggacct gccgggctgc ccgcccggag tgcagagggg at 412

<210> 230

<211> 343

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-044-Q1-K1-H12

<400> 230

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tgcatatgaa catctacaac ctctacatgc tctcatccaa ctacctgctc tgaaccctct 120
ctcctaccag caacagcact tgcacctatt acatccactt gctctaccat tcataacatc 180
catactcaac aacatcacac tattacaaca atcatctacc acctctaaca tatctcctca 240
tcttcatcgc tcacagctaa ctacaacatg ctcaactgat ctcatctaca tctctcccta 300
ctgtcaatgc acctacatac ctataacaac agacgggtgct aca 343

<210> 231

<211> 443

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-044-Q1-K1-H2

<400> 231

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ccttatgctc cttggctctt ctgcaagtgc tgctacggcg accattttcc cgcaatgctc 120

gcaagctcct atagcttccc ttcttcccc gtacctctca ccagcgggtgt cttcggtatg 180
 tgaaaaccca attcttcaac cctacaggat ccaacaggca atcgagctg gcattcttacc 240
 tttatcacc ttgttctcc aacaatcatc agccctatta caacagttac ctttggtgca 300
 tttattggca cataacatca gggcacaaca actacaaca cttgtgctag caaaccttgc 360
 tgctactct cagcaacagc agtttcttcc attcaaccaa ctaggttcat tgaactctgc 420
 ttcttatttg caacaacaac aac 443

<210> 232
 <211> 432
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-044-Q1-K1-H3
 <400> 232

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 ctctgatcaa ccaagtagct ctggcaaacc ttctctcccta ctctcagcaa caacaatttc 120
 ttccattcaa ccaactgtct aactgaacc ctgctgctta ttgcagcaa caactattac 180
 catttagcca gctagctact gcctactctc agcaacaaca acttcttcca ttttaaccaat 240
 tggccgcact gaaccccgct gcttatttgc agcagcaaat actactacca tttagccagc 300
 tagctgcagc aaaccgtgct tccttcttga cacagcaaca gttgctgcct ttctaccagc 360
 agtttgcggc taaccccgca accctcttac aactacaaca attgttgccc tttgtccaac 420
 ttgctttgac ag 432

<210> 233
 <211> 443
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-044-Q1-K1-H4
 <400> 233

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 cttccaagac attatgcctc cttgcgcttc ttgccctttt tgtgagtgc acaaatgcgt 120
 tcattattcc acaatgctca cttgctccga gtgccattat tccacagttc ctccctccag 180

ttacttcaat gggcttcgaa caccagctg tgcaagccta taggctacaa caagcgcttg 240
 eggcgagcgt cttagaacaa ccaattgccc aattacaaca acaatcctta gcacatctaa 300
 ccatacaaac catcgcaacg cagcagcaac aagcactgag ccacctagcc gtggtgaacc 360
 ctatcgctta cttgcaacaa cagctgcttg catccaaccc acttgctttg gcaaacgtag 420
 ctgcatacca acaacaacaa cag 443

<210> 234
 <211> 392
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB3061-044-Q1-K1-H5

<400> 234

aattcccggg ctttttgttg agtacatata tatatgggat gttgatttga tatagtgatg 60
 gacacatgct ttgaccatga atatgtcaaa tcagttgtac ttgcacgaag caaaacataa 120
 tataagttta ggagtaaact tataactgtg tccaaacatg ctcacacaaa ttcataccac 180
 attataatTT tttggtaaat attccacaca tgtatTTTTT acaagaaact aaattttgca 240
 cacaaatgta gcattgtaga catgtataat tctatgaacc cgtgaaactta acaacaccaa 300
 ggtcattaaa tcaactggac cctatgagta acaatttcga tatggcanac accaaattat 360
 tgaaactatt ggctgaaaat atgaccaacg ta 392

<210> 235
 <211> 424
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-044-Q1-K1-H6

<400> 235

gtttgctgag aaaccgaaag gagagcagtt gaaagcaatg atggttgaca ccaccatact 60
 tggccttgat gacgtgaggg caaaggaaat gccttatatt gctagcatgg gtatctatgt 120
 tttcagcaaa gatgtaatgc ttcagctcct ccgtgaacaa tttcctgaag ccaatgactt 180
 tggaagtgag gttattccag gtgcaaccag cattggaaag agggttcagg cttatctgta 240

tgatgggttac tgggaagata tcggtaccat tgcggcattt tataatgcaa acttgggaat 300
aaccaagaag ccaataccag atttcagctt ctatgaccgt tttgctccaa tttatacaca 360
acctcgacac ctgccacctt tcaaggttct tgatgctgat gtgacagaca gtgttaatgg 420
tgaa 424

<210> 236
<211> 354
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB3061-044-Q1-K1-H7
<400> 236

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ggtgccgggtg aagcgcgcgt ggatcgccgc cgcgcgccgg ctgacgacgc gacataagaa 120
agaagacggc ggccacggcg tcctggtgaa gctccacgac gacgttcaaa cgtgcgcgta 180
cgaggacgtg catgtgatgg tgggaaatgc tgaaccggcc caagccgaat agcttgccccg 240
cgagcccttg caaaaggcgc gcgcgcgctc gtctggctgc gccgtcacca caagatggac 300
ccgcgccggc gctgctgang aggaggacga cgacgacacc ctgatgcttt tcct 354

<210> 237
<211> 429
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB3061-044-Q1-K1-G3
<400> 237

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acttgatgga caaggactgc aaggacaaag ggtggtctgc tgctgccgcc gccggcggcg 120
gcggcgggtcg gaagcttggt gccgaagatg acaggaggga tgagtgtggc atttgccctgg 180
agacctgcac caagatggtc cttccgaatt gcaacctatgc catgtgcac aactgttacc 240
gagactggta cacaaggctc cagtcatgcc cgttctgccg cgggagcctg aagagggtcc 300
ggtccagaga cctgtgggtg ctcaccggcg acgacgacgt gatcgacacg gtgacgctgg 360

agaaggagaa cgtgaagcac ttntcagct tcatcgacag cctgcccctg atcgtccccc 420
acaacatgc 429

<210> 238
<211> 397
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-044-Q1-K1-F1

<400> 238

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ctaccaagat attatcccta cttgcgcttc ttgcgctttt tgcgagcgca acaaatgcgt 120
tcattattcc acaatgctca cttgctccaa gttccattat tacacagttc ctcccaccag 180
ttacttcaat gggcttcgaa caccagctg tgcaagccta taggctacaa caagcaattg 240
cggcgagcgt cttacaacaa ccaatttccc agttgcaaca acaatccttg gcacatctaa 300
caatacaaac catcgcaacg caacagcaac aacaattcct accagcactg agccacctag 360
ccatggtgaa ccctgccgcc tacttgcaac agcagtt 397

<210> 239
<211> 385
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-044-Q1-K1-F10

<400> 239

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ttccaggctg tataagcatc tccgatccca tccgcggcgg gttgaagcca tcagctccgg 120
tttctgcagc cggatttggg atccgcgaga tgtcttggtc cgcgcccggac gacatcctcc 180
tatacacctc cctcgccggc ttcttggaaca caaatgttgt tcttcagggt gcttgtgaac 240
gagtgattgt gggggaacaa tattgtgatg ttctcttggg gctgtacgta atccggggag 300
agaacgttgt tttaatcgga gaattggatc gcgaaaagga tgaactccct gctcacatga 360
cctgtgtttc agaagcagaa ataag 385

<210> 240

<211> 410
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB3061-044-Q1-K1-F11

<400> 240

ggtttctccc eggctccagc tcgccagctc gcgcccttcc tgctcgccca gccatctcgg 60
cgcctagggtg gccgctgcac cagccgagtc cctcccccattg tcagctgcaa gcacgcccgtg 120
ctttcttccc atggccgtct gcagcttctc ccatgggtgag ctccctccag tgccctagggt 180
ttccatggcc gtccctccct catcttgcta cccaagctga gctcgcccag cccctctctg 240
ctacctgagt tctccccacg ccagcagcca tggcacctnc ttgccctgct cagcctccct 300
ctgtgcccag cctcctatct gatcttccgt ggagcagtag cctactcta attctgcagc 360
aacagctgcc ccttattctt atgatctcca tgaatgaaag cccaagcgcc 410

<210> 241
<211> 408
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB3061-044-Q1-K1-F12

<400> 241

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cgatgctcac aagctcctat agcttccttt cttcccccat acctctcacc agcgggtgtct 120
tcagtatgtg aaaacccaat tcttcaaccc tacaggatcc aacaggcaat cgcagcaggc 180
atcttacctt tatcaccctt gttcctccaa caaccgtcag cctattaca gcagttacct 240
ttgggtgcatt tggtggcaca aaacatcaag gcacaacaac tacaacaact tgtgctagga 300
aaccttgctg cctactctca gcaacagcag tttcttccat tcaaccaact ggctgcattg 360
aactctgctg cttatttgca acaacaacta ccattcagtc agctagct 408

<210> 242
<211> 373
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-044-Q1-K1-F2

<400> 242

gaactggagt tggagtcaaa aatgaaaggc agaagtaaag atcatggtga ttttagaggt 60
gagaagcaca aaagtgaaag aatccatagc tccagctcaa ggattgaaca agaagggacc 120
acttatgata cttcactactc agaccaggag gatggtctca gggatgatga aattgaaaga 180
tttctttatt caagggcgaa gcgaggactt ggggctgttg gttccaggat ggacgagcct 240
ggtccatacc ttgattctct gtcccatcat caggacaatg gacctagccc ggacatacgt 300
gtggaagaaa aatgggaacg catagtacaa ggcccatata agcctgcatt ttgcggatgc 360
aagtctctcg atg 373

<210> 243

<211> 446

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-044-Q1-K1-F3

<400> 243

caacaagcaa catagaaagt ggaatacagt agcaaaaata gagcaacaat ggcggccaag 60
atattttcca tccttatgct ccttgctctt tctgcatgtg ttgctaacgc gaccattttt 120
cctcaatact cacaagctcc tatagctgcc cttcttcccc cataccttcc atcaatgacc 180
gctttagtat gtgaaaaccc agcccttcaa ccctacagga tccagcaagc aatcgcaaca 240
agcaacttac ctttatcaca cctgttcttt caacaatcgc cagccctatc tttggtgcag 300
tcattggtac aaaccatcag ggcagaacag ttgcagcaac tcgtgctacc agtgatcagc 360
caagtagctc tggcaaacct ttccccctac tctcagcaac aacaatttct tccattcaac 420
caactgtcta tactgaaccc tgctgt 446

<210> 244

<211> 395

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-044-Q1-K1-F4

<400> 244

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 aacaatagag caacaatggc gaccaagata ttttccctcc ttatgctcct tgctctttct 120
 acatgtgttg ctaacgcgac aattttccct caatgctcac aagctcctat agctttccctt 180
 cttcccccat accttccatc aattatagct tcaatatgtg aaaaccacgc tcttcaacca 240
 tataggcttc aacaagcaat cgcagcaagc aacatacctt tatcgccctt gttgtttcaa 300
 caatcgccag ccctatcttt ggtgcagtca ttggtacaaa ccatcagggc acaacagctg 360
 cagcaactcg tgctacctct gatcaaccaa gtagc 395

<210> 245
 <211> 419
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-044-Q1-K1-F5

<400> 245

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 gactgtgaga ctggatggaa gaatgggtggc cgccaggaag atttctgtga gaaaagctga 120
 gcaacaggtc cggactgttt acgtgctatt acgcgaatac ctttgcgaca agaaacgcta 180
 gtctcttcg aaaagatagt ttcagccact gacagttcct tttctctttg caagatcctt 240
 tgctgtttat gtttcatatt tttgcatgta acatccctta gcaatctgtt tttttttgt 300
 ttcttctgt gcagccaaat gtgtattcag agtctcaaac tgagctgcta cagaagcaga 360
 tgctgggcct tctgcggtcg gcacactatg aagcatcaaa tctttctaac gaaacgac 419

<210> 246
 <211> 338
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-044-Q1-K1-F6

<400> 246

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 tcttatgctc cttggatatat ctgcaagtgc tgctaccgcg accattttcc cgcaatgctc 120
 acaagctcct atagcttccc ttattcctca gtacctctta ccagcgggtg cttagatatg 180

tgaaaaccca attcttcaac cctacaggat ccaacaggca atcgagctg ccattctacc 240
 tttatgacct ttgttagtgc aacactcatc agacctatta cagcacttac ctttggtgca 300
 tttattgtca caatacataa gggcacaaca actacaac 338

<210> 247
 <211> 403
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-044-Q1-K1-F7

<400> 247

gaaatgctag taaatctgaa atcaagagcg cctatcgga gcttgctagg agctatcatc 60
 cagatgtaaa caaagatcct ggtgctgaac aaaagttcaa ggatatcagt aatgcttatg 120
 aggttctgtc tgatgatgag aagcgatcga tctatgataa atatggagaa gcaggctctga 180
 aggggtgctgg catgggcaca ggagattact caaaccggtt tgatctcttt gagtccctgt 240
 ttgaagggtt tgggtggaatg ggtggaattg ggggtggcgt gctgctcgga acagaccaat 300
 gcaaggatgat gatgagagct acaatctggt actcaatttc aagggaagct gtgtttggtg 360
 tgggagaaaag agattgagat aaccagattg gaaagctgta aca 403

<210> 248
 <211> 431
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-044-Q1-K1-F8

<400> 248

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 gtggattggg ctgctgcttg ttctgttggg ggggttggtt tggttctatta taaatggggg 120
 agctttatac agaagaaaga gagtgagcat gctgatggcc ctgtccagct ttccaagttt 180
 cttggacggg acaaagaaaa ggaagaagg actcaacgga gtgcaatctc tggtaaaaag 240
 ataatgatga agcttgagaa gacaaaggaa gacaaggcag cagagagcat gcgaaacgaa 300
 ctgttgaagt ttctgaatgc cagttacgat tgatgtgttc gaatcgctgg cgcataaagt 360
 gcagaattgc cctttttatc gtctttgcac tgggtgctttt ggtgatactt aagtataaac 420

gttttgttct t

431

<210> 249

<211> 121

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-044-Q1-K1-G1

<400> 249

caacaacca tcattggtgg tgccctcttt tagatttctt atgagttata gttcaatagt 60

aaagtgtttt atctgatgtt tgtggcttcc cagaaataag aaagtacatt tctagattct 120

t 121

<210> 250

<211> 362

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-044-Q1-K1-G10

<400> 250

aaaaaaaaag aataagaaga aaggaatccc tcctacgcgg gagcgaagag attcgtcggc 60

tcagccgcct ctctgctcag atctgcggcg gagcctcgcc ggcggcctgc gccccgcggc 120

gccgccgatc caagatgcct tcgtgcgtgc agggatgctg ctgctgctcg tccctgcgcc 180

ttctcccccg cgacgacgcy ctctcgctcc cctccgcctg cgcgcaccgc ctgaagcctt 240

ggtcttggyg tgcccaatcc cccacctcgt cctcctaacy cttgtccccg cccgctcccc 300

acctgatct acctgtctct accttcctt tctccatttc tacatctccc cgttgctgct 360

ct 362

<210> 251

<211> 419

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-044-Q1-K1-G11

<400> 251

gttacttcaa tgtgccttcg aaacacccag ctgtgcaagc ctataggcta caacaagcga 60

ttgcggcgag cgtcttataa caaccaattg cccaattgca acaacaatcc ttggcacatc 120
 taacaatata aaccatcgca acgcatcagc aacaacagtt cctaccagca ctgagccacc 180
 tagccatggt gaaccctgtc gcctacttgc aacagcagct gcttgcaccc aaccacttg 240
 ctctagcaaa cgtagtgtga aaccagcatc aacaacaact gcaacagttt ctgccagcgc 300
 ttagtcaact agccatggtg aaccctgccg cctacctata acagcaacaa ctgctttcat 360
 ctagcccgct cgctgtggcc aatgcaccta cctacctgca acaagaattg ttgcaacag 419

<210> 252
 <211> 420
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-044-Q1-K1-G12

<400> 252

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 acgcagcagc aacaacaatt tctaccagca ctgagccaac tagctgtggt gaaccctgtc 120
 gcctacttgc aacagcagtt gcttgcaccc aaccacttg ctctggcaaa catagtgtga 180
 taccaacaac aacaacaatt gcaacagttt ctaccagcgc tcagtcaact agccatggtg 240
 aaccctgccg cctacctata acagcaacaa ctgattttcat ctagccctct cgctgtgggt 300
 aatgcaccta cctacctgca acaacagttg ctgcaacaga ttgtaccagc tctgactcag 360
 ctagctgtgg caaacctgtc tgcctacttg caacagctgc ttccattcaa ccaactgact 420

<210> 253
 <211> 412
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-044-Q1-K1-E9

<400> 253

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 gcttcttatt tgcaacaaca acaactacca ttccagccagc tacctgctgc ctacccccag 120
 caatttcttc cattcaacca actggcagca ttgaactctc ctgcttattt acagcagcaa 180
 caactactac cattcagcca gctagctggt gtgagccctg ctaccttctt gataacaaca 240

cagttgttgc cgttctacca gcacgctgcg cctaacgctg gcaccctctt acaactgcga 300
 caattgctgc cattcaacca acttgctctg acaaaccag cagcgttcta ccaacaaccc 360
 atcattgggg gtgccctctt ttagatatct tatgagttat agatcaataa ta 412

<210> 254
 <211> 399
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-044-Q1-K1-D2

<400> 254

cccacgctc cgccaactag caacatagaa agcacaatag tgtaccaaca atggcagcga 60
 aaatattttg cttccttatg ctcttggtc tttctgcaag tgttgctacc gcaaccattt 120
 tcccacaatg ctcaaacgt cctatagctt cccttcttcc ccatacctc tcaccagcgg 180
 tgtcttcaat gtgtgaaacc ccaattgttc aaccctacag gatccaacag gcaatcgcaa 240
 caggcatctt accattatca cccttggtcc ttcaacaacc gtcagcccta ttacagcagt 300
 tacctttggt ccatttggtg gcacaaaaca tcagggcaca acaactacaa caacttgctg 360
 tagcaaacct tgctgcatac tctcagcaac atcagtttc 399

<210> 255
 <211> 398
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-044-Q1-K1-D3

<400> 255

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 gcctttgctt tctcgtcta cagacaccag atcatcaacg tgtacaatca ggagtacgag 120
 agtgctgctg cgttctggcc tcagggtcac tcccgataa tagctagcct actcatctct 180
 catgtaactc tgtttggtt gatgagcaca aaggaagctg cgtactccac ccctctgctc 240
 atcttctgct ctctgctgac gatctgggtc cacaataact gcaagagccg gttcgaacca 300
 gctttcagaa agtatcctct tgaggaagca atggcgaagg acaccatgga gcacgcacg 360
 gagcctaacc tgaacctgga atccttctct gctaacgc 398

<210> 256
 <211> 400
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-044-Q1-K1-D4

<400> 256

tttcagcatt caaaaacaca ccaagcgaag cgcactagca acgacctaac accaatgggt 60
 accaagatat tagccctcct tgcgcttctt gcccttttag tgagcgcaac aaatgcgttc 120
 attattccac agtgctcact tgctcctagt gccattattc cacagttcct cccaccagtt 180
 acttcaatgg gcttcgaaca tccagccgtg caagcctaca ggctacaact agcgcttgcg 240
 gcgagcgcct tacaacaacc aattgccccaa ttgcaacaac aatccttggc acatctaacc 300
 ctacaaacca ttgcaacgca tcaacaacat caacaacagt ttctgccatc actgagccac 360
 ctagccgtgg tgaaccctgt cacctacttg caacagcagc 400

<210> 257
 <211> 394
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-044-Q1-K1-D6

<400> 257

cactcgcccg tagcaacatc ttagcaccaa tggcagcttt gattttttcg ctcccttgccc 60
 tccttgctgt ttcacagat atttctaccg cgactattat tccacaatgc tcacaacaat 120
 acctctctcc agtgatagcc gctagatttg aatacccac c tatacaatcc tacaggctac 180
 aagaggccat cacagcaagc atcttacggt cgtttagcatt gaccgtccaa caaccatattg 240
 ccctattgca acaaccatcc ttagtgaatc tgtatctcca aagaatcaca gcacaacaac 300
 tacaacaact gttgctttca acaattaatc aattatttgc agcgaacctt gctgcttacc 360
 ttcagcatca acaatttctt ccatttaatc aact 394

<210> 258
 <211> 345
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-044-Q1-K1-D7

<400> 258

cctctccctc ctccaaccca agctaagcta aacagcttac acagcttgct ccgccatcac 60
cgtatcgaga gagacagaga caggctagcg agggaaatgga gaggatgctg gccaggctga 120
tgcgggcgcg gagctccgtc cccctgtccg gcctcctcca ccacggagga gcgccccgcc 180
cgctgcaggc cgccggcgcc actggggcct ccccgctgat cttgtcgcac cagcagcagc 240
agcagcacac ggccgccttc gccgtcctgc cggtgctcaa gatcagggac tccgcgtccc 300
agctgatcgg gaggaccccg atggtgtacc tgaacaaggt gaccg 345

<210> 259

<211> 420

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-044-Q1-K1-D9

<400> 259

attgagacca actagcaaca tagaaagcac aatagtgtac caacaatggc agccaaaaga 60
ttttgggtcc ttatgctcct tgggtctttct gcaagtgtg ctaccgcaac cattttccca 120
caatgctcac aagctcctat agcttccttt cttcccccat acctctcacc agcgggtgtct 180
tcagtatgtg aaaacccaat tcttcaaccc tacaggatcc aacaggcaat cgcagcaggc 240
atcttacctt tatcacctt gttcctccaa caaccgtcag ccctattaca gcagttacct 300
ttggtgcatt tgttggcaca aaacatcaaa gcacaacaac tacaacaact tgtgctaaga 360
aaccttgctg cctactctca gcaacagcag tttcttccat tcaaccaact ggctgcattg 420

<210> 260

<211> 417

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB3061-044-Q1-K1-E11

<400> 260

attgatacca actagcaaca tacatagtga agtacactag caacatctta gcaccaatgg 60
gagccaagat ttttgccctc cttgccctcc ttgctctttc agcaagcgct gctacctga 120

cttttattcc acaatgctca caacaatacc tctctccggt gacagccgcg ggatttcaat 180
 acccaactat acaatcctac atggtacaag aggccatcca agcaagcatc ttacgggtcat 240
 tagcattaac ccttcaacaa ccatatgctc tattgcaaca gccatcctta gtgcatctgt 300
 atctccaaag aatcgcgga caacaactac aacaacagtt gctaccaaca atcaatcaag 360
 tagttgcagc gaaccttgct gcttacctnc agcaacaaca gtttcttcca ttcaatc 417

<210> 261
 <211> 332
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-044-Q1-K1-E2

<400> 261

caactagcag cattgaactc tgctgcttat ttacagcagc aacaactact accattcggc 60
 cagctagctg atgtgagccc tgctgccttc ttgacacaac aacagttggt gccgttctac 120
 ctgcacgcta tgcctaacgc tggcaccctc ttacaactgc aacaattgct gccattcaac 180
 caacttgctt tgacaaactc aacagtgttc taccaacaac ccatcattgg tgggtgccctc 240
 ttttagattg cttatgagtt atagttcaat aatgaagttt tttggatgat gtttgtggcg 300
 tcccagaaat aagaaagtac atttctagat tc 332

<210> 262
 <211> 404
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-044-Q1-K1-E3

<400> 262

cgttgggcat ggcccacctg ccattgttag aggcggaagc ccacaggcgg acccgaatcc 60
 agaattcctg aatcctgtca ctgctcgaac atcgaaatcg atccgatctc cgcttgcgct 120
 gaagcctgat ctccaccggg ttgcgagcag gggcgcagga cctcgatcac gaggaggcag 180
 gggagcagca tccacaacca caagccatgg cggggagggc caacatcccc actaacaact 240
 ccgccctcat cgcaatcatc gccgacgagg acaccgtcac tggcttcttg atggccggcg 300
 ttggcaatgt tgatctgctc aagaaaacca actacctcct cgtcgacaac aagacgacag 360

ttaaacaat cgaggatgcg ttcaaagaat ttactacgag ggag

404

<210> 263
<211> 439
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB3061-044-Q1-K1-E4

<400> 263

gccaaaccct acttgccacc gccaaacttc cgccttcgtc cgcgcggcg ccgtctatc 60
gctctaaaat aacctttcca gttccaccgg gactagctga aaggagaggg aacggagggg 120
gatggcgtcg ccggacgacg agataagccg gctcttccgc atccgccgca cgggtgatga 180
gatgctgctc gaccgcggat acggtgtccg cgacgaacaa atcaagctcg aaaggcacia 240
gttcatcgaa cgctacggca accccgtccg ccgtgacgag ctacacctca acgccacaaa 300
gttgaacggc ccacggacc agatctacgt gttctttcct aatgaggcaa agcccggngt 360
gaagacaatc aggaactacg tcgagaagat gaagaacgag aacgtcttcg gccgcatact 420
cgtcgtgcaa caggcgctc 439

<210> 264
<211> 393
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB3061-044-Q1-K1-E5

<400> 264

attgagacca actagcatca tagaaagcac aatattgtac caataatggc agccaaaaga 60
ttttgcctca ttatgctcct tgggtctttct gcaagtgtg ctacggcgag cattttcccg 120
caatgctcac aagctcctat agcttccctt cttcccccat acctctcacc agcgatgtct 180
tcagtatgtg aaaatccaat tcttctaccc tacaggatcc aacaggcaat cgcagcaggc 240
atcttacctt tatcaccctt gttcctccaa caatcatcag ccctattaca gcagttacct 300
ttgggtgatt tattggcaca naacatcatg gcacatcaac tacaacatct cgtgctagca 360
aaccttgctg cctactctca gcatcagcag tta 393

<210> 265
<211> 438
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-044-Q1-K1-E6

<400> 265

gaccaacaag caacatagaa agtgggaatcc agtagcaaca acagagcaac aatggcgacc 60
aagatatgtt ccctccttat gtccttgct ctttctgcat gtgttgctaa cgcgacaatt 120
ttccctcaat gtcacaagc tcctatagct tcccttcttc ccccatacct tccatcaatg 180
atagcttcag tatgtgaaaa ccagctctt cagccctata ggctccaaca agcaatcgca 240
gcaagcaaca tacctttatc acccttggtg tttcaacaat cgccagccct atctttggtg 300
cagtcattgg taaaaacat cagggcacag cagctgcagc aactcgtgct acctgtgatc 360
aaccaagtag ctctggcaaa accttctccc tactctcagc aacaacaatt tcttccattc 420
aaccaactgt ctacactg 438

<210> 266
<211> 408
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-044-Q1-K1-E7

<400> 266

gcaggagatg cgcacgcgc acttcgtggt gaaggagccg atggtgatcg ggcacgagtg 60
cgcgggcggtg gtcgaggagg tgggcgccgg cgtgacgcac ctgtccgtgg gcgaccgct 120
ggcgctggag ccgggcgtca gctgctggcg ctgccgccac tgcaagggcg ggcggtacaa 180
cctgtgcgag gacatgaagt tcttcgccac ccgcgcggtg cacggctcgc tggcgaacca 240
ggtggtgcac ccggccgacc tgtgcttcaa gctccccgac ggggtgagcc tggaggaggg 300
cgccatgtgc gagccgctga gcgtgggcgt gcacgcgtgc cgtcgcgctg ggggtggggcc 360
cgagacgggc gtgctcgtgg tgggcgccgg ccccatcggc ctggtgtc 408

<210> 267
<211> 412

<212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-044-Q1-K1-E8
 <400> 267
 gaaagcacia tagtgtacca acaatggcag ccaaaatatt ttgcttcctt atgctccttg 60
 gtctttctgc aagtgttgct accgcaacca ttttcccaca atgctcacaa gtcctatag 120
 cttcccttct tccccatac ctctcaccag cggtgtcttc aatgtgtgaa accccaattg 180
 ttcaacccta caggatccaa caggcaatcg caacaggcat cttaccatta tcacccttgt 240
 tcctccaaca accgtcagcc ctattacagc agttaccttt ggtccatttg gtggcacaaa 300
 acatcagggc acaacaacta caacaacttg tgctagcaaa ccttgctgca tactctcagc 360
 cacatcagtt tcttccattc aaccaactgg ctgcattgaa ctctgctgct ta 412

<210> 268
 <211> 412
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-044-Q1-K1-D12
 <400> 268
 eggacgcgtg gggtttcaaca ttcaaaaaca caccaagcga agcgcactaa caacgacctg 60
 acaccagtgg ctaccaagat attaaccctt cttgggcttc ttggcctttt agtgagcgca 120
 acaaatgcgt tcattattcc acagtgtcga cttgctccta atgccattat tccacagttc 180
 cttccaccag ttacttcaat gggcttcgaa catccagccg tgcaagccta caggctacaa 240
 ctagcgcttg cggcgagcgc cttacaacaa ccaattgccc aattgcaaca acaatccttg 300
 gcacatctaa ccctacaaac cattgcaacg caacaacaac aacaacaaca gtttctgcca 360
 tcactgagcc acctagccgt ggtgaaccct gtcacctact tgcaacagca gc 412

<210> 269
 <211> 400
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-046-Q1-K1-D5
 <400> 269

cccacgcac ctagcaaaca ataatccaca ctcaacaatt taccaacaat cactaccaat 60
 atgagaatgc tacttatata ccttactctc tcttcatata tttataactc aacaatcttc 120
 cctcaatgct cacaaactcc tatactctcc cttcttcccc cataccttcc atcaatcata 180
 tctacaatat gtgaaaaccc acctcttcat ccttatatac tccaacaagc aatcactaca 240
 aacaacatac ctctatcacc cttactgatt caacaatcac cagccatata tttcttacat 300
 tcattgctac aaaccatcaa ttcacatata ctacaacaac tgcacctacc tacgatcaat 360
 caattcactc ctctcaacct acctctctac tttcactaac 400

<210> 270
 <211> 305
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-046-Q1-K1-D6
 <400> 270

gttgcgccta acgctggcac cctcttacia ctgcaacaat tgctgccatg gaaccaactt 60
 gctttgacaa acccagcagt gttctaccaa caacccatca ttggtggtgc cctcttttag 120
 atttcttatg agttatagtt caataataaa gttttttatc tgatgtttgt ggcttcccag 180
 aaataagaaa gtacatttct agaaaaaaaa ataaacaaag aaaaaattga acatgtagac 240
 tctggcaagt cgaccaccac tggacacctg atctacaagc taggcttaat tgacaagcgt 300
 gtgat 305

<210> 271
 <211> 438
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB3061-046-Q1-K1-D7
 <400> 271

attattgaga ccaactagca acatagaaag cacaatagtg taccaacaat ggcagcgaaa 60
 atattttgcc tccttatgct ccttgggtct tctgcaagtg ctgctacggc gaccattttc 120
 ccgcaatgct cgcaagctcc tatagcttcc cttcttcccc cgtacctctc accagcggtg 180

tcttcgggtat gtgaaaaccc aattcttcaa ccctacagga tccaacaggc aatcacagct 240
 ggcattcttac ctttatcacc cttgttcttc caacaatcat cagccctatt acatcagtta 300
 cctttgggtg catttattgg cacanaacat cagggcacia caactacaac aacttgtgtc 360
 agcaaacttt gctgcctact ctcagcaaca gcagtttctt ccattcaacc aactagctgc 420
 attgaactct gcttctta 438

<210> 272
 <211> 436
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB3061-046-Q1-K1-D9

<400> 272

gatctatgaa agaatgcatg taacaagatc tccagtctgg tactgatgaa gagacaggaa 60
 gagaacacat agccaccatc aatcaagaca aagggaacac taccattacc tcaattggat 120
 ttctgggtttt tgggctatca ttggattttt gggttaactga aatgtgtacc ttgcagtagc 180
 tctatgtctc tatatggcat tatgggtgtc gaaactggat cattatattt tcatttgagt 240
 gaaattctta tcaaagtgtg aaccttcagg ctccagcttg atctgattca tgtttttttc 300
 tagattacca tagttgatga agcaaagaaa ttatacatgt tatttgtcct tgggggcta 360
 gtttccatta tcttttctgg gctacaatga agtatttctc aaatttgccg aagacattgn 420
 gtcttggaat tgatgg 436

<210> 273
 <211> 312
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-046-Q1-K1-E1

<400> 273

cggacgcgtg ggcgaagtca ttccctcttc aagagggcat catcagattg ggcttattga 60
 ttccggatta cttcaggcaa ggatcggagt tgctctgaat tgactgaacc atggcggcga 120
 caatggcagt gaccaccatg gtgaccaaga accaggagag ctggctgtca ttgcaagtc 180
 cggccgtggc attcccttgg aagccaccaa gccgtggcaa gaaccgcggg cttgaatttc 240

cttggcgggc caaggtcggc aacgttcggc ttaaccgggg gcccggcgtt cccggcgggc 300
 cccaaccgc gg 312

<210> 274
 <211> 389
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB3061-046-Q1-K1-E10

<400> 274

tgaagtgt gatcgttgcc cttgctctcc tggcgctcgc tgcgagcgcc gcctacagta 60
 caggcggcgg ctgtggctgc cagacaccac cgtttcatct accgcctccg ttctatatgc 120
 cgctccgtt ctatctgccg ccgcagcagc agccgcagcc atggcaatac cccactcaac 180
 caccgcagct aagcccgctgc cagcagttcg gatcctgccg gcgtcggcag cgtcggcagc 240
 ccgttctctg gccagtgcgt cgagttcttg aggcaccagt gcagcccggc ggcgacgccc 300
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 gagccgctgc accggtacca ggcgacata 389

<210> 275
 <211> 197
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-046-Q1-K1-E11

<400> 275

tggactccta aactcaaca catcaattct atattctact ataaacactt gtggccgtta 60
 acttataacg actatttgac ctactacaat aacaaccctt tgtacatcta actataccaa 120
 ccatatcatc tctctaccaa cactaactca tccatctagc cttctttaac attactatt 180
 acttgcaaca acatctt 197

<210> 276
 <211> 321
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-046-Q1-K1-E12

<400> 276

cttagcacca atggcagcca agatttttggc catcctggcc ctccctggctc tttcagcaag 60
cgttgctacc gcgagtatga ttccacaatg ctccacaaca tacctctctc cggtgacagc 120
cgcgagattt gaatacccaa ctatacaatc ctacaggcta caagaggcca tcgcagcaag 180
catcttacgg tcgtagcat tgaccgtcca acaaccatat gccctattgc aacaaccatt 240
cctattgaat ctatatctcc aaagaatcgc agcacaaca ctacaacaac agttgctttc 300
aacaatcaat caagtagttg c 321

<210> 277

<211> 250

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB3061-046-Q1-K1-E2

<400> 277

ggggtctgca tgtccgacca caactgcgcg caggtgtgct tgcaggaagg ctacgggggc 60
ngcaactgcg acggcatcat gcgccagtgc aagtgcata gggagtgcta gctagctagg 120
ctctaggatc tagcaagcta gctatatcgg cctttaatta aattaataag gatcgacgct 180
gtggccggtc gctaaatatg tactactata cgtctacact acatgcaata atgcaaccac 240
atgtacgcgt 250

<210> 278

<211> 242

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-046-Q1-K1-E3

<400> 278

cccacacgta cgtccagcga catatacagt agaatccatt agccaccatt gagcaacagt 60
atccgccaac atatttttcc tccttatgct tcttgcctct tctacatgtg ttgctaacgc 120
gacaaatggt catcaatgct tacaagctcc tatagcttcc catatttccc catacctttc 180
atcaattatt ggctaaatat gtgaaaaccc cactttttta ccctataagc ttttaacaagc 240

aa

242

<210> 279
<211> 423
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-046-Q1-K1-E4

<400> 279

tgggcttcga acacccagct gtgcaagcct ataggctaca acaagcgctt gcggcgagcg 60
tcttagaaca accaattgcc caattacaac aacaatcctt ggcacatcta accatacaaa 120
ccatcgcaac gcagcagcaa caagcactga gccacctagc cgtgggtgaac cctatcgctt 180
acttgcaaca acagctgctt gcatccaacc cacttgcttt ggcaaacgta gctgcatacc 240
aacaacaaca acagttgcaa cagtttctac cagcgctcag tcaactagcc atgggtgaacc 300
ctatcgctta cctacaacag caacaacttc tttcatctag cccgctcgct atgggcaatg 360
cacctacata cctgcaacaa cagttgttgc aacaacagtt gctgcaacaa attgtaccag 420
ctc 423

<210> 280
<211> 434
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB3061-046-Q1-K1-E5

<400> 280

gaagagcacc ctgatttttg tatcatggac ccatttaaaa acattttacc gttgctggac 60
cgtcttcaaa tccaaaaaat ccttgtccgg ttgcaagaac ttggcactga aggaaagcca 120
aaacttcgag caccgtattc ttgcaagggt gacagttttc ataatgggtga attggataag 180
catctagtag aagctaattt atccttccca ctcatgtga agccacaagt cgcttgtgga 240
gtcgctgatg ccacacaatat ggcaactggt tttcagattg aagaatttag caacctcagt 300
gtgccccttc ctgctgtgct acaggaatac gtggatcacg gatccaagat tttcaagttc 360
tatgtgatcg gagacaaggt tttctacgcc gttagagact caatgccc aa cgcgcgcttn 420

ctgaagccgt cgtc

434

<210> 281
<211> 430
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-046-Q1-K1-E7

<400> 281

gcaacataga aagtggaata cagtagcaac aatagagcaa caatggcggg caagatggtg 60
ttccatcctt atgctccttg ctctttctgc atgtgttgct aacgcgacca tttttcctca 120
atactcacia gctcctatag ctgcccttct tccccatcac cttccatcaa tgaccgcttc 180
agtttgtgaa aaccagccc ttcaacccta caggctccaa caagcaatcg caacaagcaa 240
cttaccttta tcacccctgt tctttcaaca atcgccagcc ctatctttgg tgcagtcatt 300
ggtacaaacc atcagggcac aacagctgca acaactcgtg ctaccagtga tcagccaagt 360
agctctggca aacctttctc cctactctca gcaacaacaa tttcttccat tcaaccaact 420
gtctacactg 430

<210> 282
<211> 443
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-046-Q1-K1-E8

<400> 282

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tatagcaaca atgaccgca aaatgttctc catcctaata ctgctggctc tttctacatc 120
tgttgctaac ccgaccattt ttcctcaata ctacattct cctatatctg tctacttcc 180
cccatacctt ccatcaatga cctctacaga tttcgaaaac ccatccctac aaccctacat 240
tctccaacaa tcaatcgcaa catgcatctt acctttatca cccctgatat ctcaacattt 300
cacaacccta tctttaatgc aatcattggg acaaacatc acggcacatc agcttcaaca 360
acttgatcta ccattgatca gccaaacttat ctatacaaac ctttctccct actctcaaca 420
acatcaattt acttcattca acc 443

<210> 283
 <211> 439
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3061-046-Q1-K1-E9

 <400> 283

gaagctgggtg cttgtgggtc ttgctttcat tgctttagta tcaagtgttt cgggtaggca 60
 gacaggcggc tgcagctgtg gtcaacaaca aagccatgag cagcaacatc atccacaaca 120
 acatcatcca caaaaacaac aacatcaacc accaccacaa catcaccagc agcagcaaca 180
 ccaacaacaa caagttcaca tgcaaccaca aaaacatcag caacaacaag aagttcatgt 240
 tcaacaacaa caacaacaac cgcagcacca acaacaacaa caacaacaac agcaccaaca 300
 acaacatcaa tgtgaaggcc aacaacaaca tcaccaacaa tcacaaggcc atgtgcaaca 360
 acacgaacag agccatgagc aacaccaagg acagagccat gagcaacaac atcaacaaca 420
 attccagggt catgacaag 439

<210> 284
 <211> 396
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB3061-046-Q1-K1-F1

 <400> 284

gggctctcag accattagct ttatctactc cagagcgcag aagaacccga tcgacacgat 60
 gaggggtgttg ctcgttgccc tcgctctcct ggctctcgct gcgagcgcca cctccacgca 120
 tacaagcggc ggtgcgggt gccagccacc gccgccggtt catctaccgc cgccgggtgca 180
 tctgccacct ccggttcacc tgccacctcc ggtgcatctc ccaccgccgg tccacctgcc 240
 gncgccggtc cacctgccac cgccggtcca tgtgccgncg ccggttcacg tgccgncgnc 300
 accatgccac tnaccctact caaccgcccg gcctcagcct catccncagc cacacccatg 360
 cccgtgcaa cagccgcac caagcccgtg ccagct 396

<210> 285
 <211> 443

<212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB3061-046-Q1-K1-D4

<400> 285

ccatcgcaac gcaacagcaa caacagttcc taccagcact gagccaccta gccatgggtga 60
 accctgtcgc ctagttgcaa gagcagctgc ttgcatccaa cccacttgct ctagcaaacg 120
 tagttgcaaa ccagcaacaa caacaactgc aacagtttct gccagcgctt agtcaactag 180
 ccatgggtgaa ccctgccgcc tacctacaac agcaacaact gctttcatct agcccgcctcg 240
 ctgtggccaa tgcacctaca taccttgac angaattggt gcaacagatt gtaccagctc 300
 taactcagct agctgtggca aaccctgttg cctacttgca acagctgctt ccattcaacc 360
 aactaactat gtcgaactct gttgcgtacc tacaacagcg acaacagtta cttaatccat 420
 tggcagtggc taaccattg gtc 443

<210> 286
 <211> 345
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-046-Q1-K1-C10

<400> 286

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 caggatatta tccctctttg cgcttcttgc cctttttgtg agcgcaacaa atgcgttcat 120
 tattccacaa tgctcacttg ctctagtgc cattattcca cagttcctcc cttcagttac 180
 ttcaatgggc ttcgaacacc cagctgtgca agcctacagg ctacaacaag cgcttggcgg 240
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 taaaaccat cgcaacgcaa cagcaacaac aatttctacc agcac 345

<210> 287
 <211> 438
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-046-Q1-K1-C11

<400> 287

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aacaactaca acaacggttg cttccaacaa ttaatcaagt agttgcagcg aaccttgctg 120
cttaccttca gcaacaacaa tttcttccat tcaatcaact agctgggggtg aaccttgctg 180
cttacttgca ggcacaacag ctactaccat tcaaccaact tgtcggggagc cctgctgccca 240
tcttattgca gcaacagttg ctgccattcc gtctacaagt tgttgcaaac attgctgctt 300
tcttgcaaca acaacaattg ctgccatttt acccacaggt tgtgggaaac attaacgcct 360
tcttgcaaca acaacaattg ctgccattct acccacagga tgtggcaaac attgtgcct 420
tcttacaaca acagcaat 438

<210> 288

<211> 450

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-046-Q1-K1-C12

<400> 288

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cagacagtgt tattggtgaa ggatgtgtta ttaaaaaactg caagataaac cattctgtag 120
ttggactccg atcttgcata tctgaagggtg ctatcataga ggacagttta ctaatgggtg 180
ccgactacta ttagacaaaa gcttggttaaa aacttctttg cgaaaaaagt ggcattccta 240
ttggtattgg gaaaaattca tgccttaaga gaaccatcat tgaccagaat ggctcaattg 300
gagacaatgt taagatacct catgctgaca atgttcaaga agctgcaagg gagaccaaac 360
ggtaccttat tcaaagggtg aattgtcaca gtgatcaagg atgctttact ccctagtggg 420
acagttatat gaagtgaacg tgcgacatgc 450

<210> 289

<211> 260

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-046-Q1-K1-C2

<400> 289

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 ataaagaaaa aattaagggt ggaaaatttt attaaattaa tattaataaaa atcataactta 120
 ttaaatacata tatcttttat atattacact gaaattattt taaatgttct ttattttata 180
 acatatcaat tttcaaaact tttactttat ccaatttaac ctcataaatc caatttgatt 240
 tttatcaata ttgtttttta 260

<210> 290
 <211> 416
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-046-Q1-K1-C4

<400> 290

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 ctccggcgcc gttgcgcgcc gatacgcgcc ccgccggatt caccgctcct cgcgctgcag 120
 caccgccggg cctggaaaaa gaggcaactc tgggggaata acggatttca ccttgtttac 180
 aggttactgc gtgacatgta gtattgtata attggagggt gtcaccatca ccacaaagca 240
 tatgttgta tttgtcgatg gcgaggagat gaaacagggt taggggcgga gcagcaagga 300
 catgacagcc atgccgcac cgcgccaccg aggcgctgct aagaagccca tgtggatcat 360
 agtgctattg tctttggttt gtgttgact tatgggggcc tatgtctacc caccac 416

<210> 291
 <211> 435
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-046-Q1-K1-C5

<400> 291

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 acaacaacaa ctaccattca gccagctacc tgctgcctac cccagcaat ttcttccatt 120
 caaccaactg gcagcattga actctcctgc ttatttacag cagcaacaac tactaccatt 180
 cagccagcta gctggtgtga gccctgctac cttcttgata caaccacagt tgttgccgtt 240
 ctaccagcac gctgcgccta acgctggcac cctcttataa ctgcaacaat tgctgccatt 300

caaccaactt gctttgacaa acccagcagc gttctaccaa caacccatca ttggtggtgc 360
cctcttttag atttcttatg agttatagtt caataataaa gttttttgac tgatgtttgt 420
ggcttcccag aaata 435

<210> 292
<211> 318
<212> DNA
<213> Zea mays
<223> Clone ID: LIB3061-046-Q1-K1-C6
<400> 292

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gaggcttcaa caggaggaag aactggctaa gcacatggct gaggaggagg atgacgactt 120
ctaaattagc tgccttttga gcaaccactt gcaattgtgg acttggttga acgcctgggt 180
aaaccctgcc tctagctact cgagtcatgc aaaaacactg aactttgaaa ttcattccact 240
gtaatgtttt gttgatcagg ggtttcttta aattcaatac ttgagtttta aaaaaaata 300
caaccaacaa gctaagac 318

<210> 293
<211> 441
<212> DNA
<213> Zea mays
<223> Clone ID: LIB3061-046-Q1-K1-C7
<400> 293

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ctccgagtga tttgcgctga gcgatcagtt catccagagc gagcgagct gagctgagct 120
gagctgagcg agcttgctgtt gcttgagaga ccctgctgcc atggcttccc accaggacaa 180
ggctagctac caggccggcg agaccaaggc ccgcaccgag gagaagaccg ggcaggcggt 240
gggggcgacc aaggacacgg cgcagcacgc caaggaccgg gcggcgagcg cggcggggca 300
cgcggcgggc aagggccagg acgccaagga ggccaccaag cagaaagcgt ccgacaccgg 360
cggctacctg ggaaagaaga ccgacgaggc caagcacaag gccggcgaga cgacggaggc 420
caccaagcag aaggccagcg a 441

<210> .294
 <211> 422
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-046-Q1-K1-C8

<400> 294

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 gacgacgagc gccactacg gcaggatgac gacgctcagg aacctcaaga tcaagacgtc 120
 gacgtgcaag aggatcgtga aggagctgcg ctctgtacgag aaggaggtgg agaaggaggc 180
 tgccaagacc gccgacatga aggagaaggg cgccgatccc tacgacctca aacagcagga 240
 gaatgttttg gctgagtcaa ggatgatggt ccagactgc cacaacgac ttgaaactgc 300
 actggctgac ttgaaagcaa cactggctga actgaaggag tcaaatagagc aagggtgccga 360
 gattggagaa gctgagagta caatcgcaga agttgaagca gttgtcaagc cagcaggaga 420
 tt 422

<210> 295
 <211> 435
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-046-Q1-K1-C9

<400> 295

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 caatgctcac aagctcctat agcttccctt cttccccgt acctctcacc aacggtgtct 180
 tcggtatgtg aaaaccaat tcttcaacct tacaggatcc aacaggcaat cgcagctggc 240
 atcttacctt tatcaccctt gttcctccaa caatcatcag ccctattaca gcagttacct 300
 ttggtgcatt tattggcaca aaacatcagg gcacaacaac tacaacaact tgtgctagca 360
 aaccttgctg cctactctca gcaacagcag tttcttccat tcaaccaact agctgcattg 420
 aactctgctt cttat 435

<210> 296

<211> 443
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3061-046-Q1-K1-D1

 <400> 296

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 atatgttccc tccttatgct ccttgctctt tctgcatgtg ttgctaacgc gacaattttc 120
 cctcaatgct cacaagctcc tatagcttcc cttcttcccc cataccttcc atcaatgata 180
 gcttcagtat gtgaaaaccc agctcttcag ccctataggc tccaacaagc aatcgagca 240
 agcaacatac ctttatcacc cttgggtggtt caacaatcgg cagccctatc tttggtgcaa 300
 tcattggtac caaccattag ggcacagcaa cttgaacaac ttgggctacc cggtgatcaa 360
 ccaagtagct tctgccaaac cttcttccct actctcagca acaacaattt cttccattca 420
 acccactgtc tacacttgac cct 443

<210> 297
 <211> 444
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3061-046-Q1-K1-D10

 <400> 297

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 catcagttac cttgggtgca tttattggca caaaacatca aggcacaaca actacaacaa 120
 cttgtgctag caaaccttgc tgcctactct cagcaacagc agtttcttcc attcaaccaa 180
 ctagctgcat tgaactctgc ttcttatttg caacaacaac aactaccatt cagccagcta 240
 cctgctgcct acccccagca atttcttcca ttcaaccaac tggcagcatt gaaactctcc 300
 tgcttattta cagcagcaac aactactacc attcagccag ctagctggtg tgagccctgc 360
 taccttcttg atacaaccac agttgttgcc gttctaccag cacgctgcgc ctaacgctgg 420
 caccctctta caactgcaac aatt 444

<210> 298
 <211> 435
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-046-Q1-K1-D11

<400> 298

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aagatcgccg cagccgccgc ggcgggcgcg gcgctgtgct tcgcggccct ggtggccgtg 120
gccgtctgcc aaggcgaggt cgagcggcag aggctcaggg acctgcagtg ctggcaggag 180
gtccaggaga gcccgcctga cgcgtgccgc caggtcctcg accggcagct aaccggcggc 240
ggcgtcggcg gcccgttcgc gtggggcacc gggctccgga tcggtgtgtg ccagcagctc 300
caggacgtga gccgcgagtg ccgctgcgcc gccatccgga gcatggtcag gggctacgag 360
gaggccatgc cgcctctgga gaaaggctgg tggccacatg ggcggcagca gcagccgccg 420
ccgcagggag gagga 435

<210> 299

<211> 355

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-046-Q1-K1-D12

<400> 299

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gcctgcgcct gcgcctgcta cctgcgatcc atctctcatg gcgaccacca gcgccaggag 120
gccgagcggc ccggtgtctt cggacgcgca ctaccagctc cgctcgcgcg acgcgcgttt 180
tcgctcggcg ggcagcccgt cagcgtcagc gtgtactcgt cgtcgcaggg gcggacgacc 240
tgcatgtgct cgccgaccaa ccacccgggc tcgttcgggt gcatcctgca caaggagcgc 300
gtcaagccgg cggcggagcc ccacgggcac atgcacgggc gacggcacgg gaagc 355

<210> 300

<211> 367

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB3061-046-Q1-K1-D2

<400> 300

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 ctcagagctc cagacgcagt cggccgccgc agaccgggag tagccgacgc gccgtcactg 120
 aatcctcaga tcacggctag ccgtaatcac gacactctgg tgactcccgg cgagcagtgt 180
 aacatttttc ttcaaccatg ggccaagaga aaaactcaca tcaacattgt ggtcattgga 240
 catgtcgact ctggcaagtc gaccaccact ggncacctga tctacaagct cggcgggtatt 300
 gacaagcgtg tgattgagag gttcgagaaa gaggccgcgg agatgaacaa gcgggtcattc 360
 aagtatg 367

<210> 301
 <211> 440
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB3061-046-Q1-K1-A8
 <400> 301

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 cctacttatg ctcttggtc tttctgcaag tgctgctacg gcgaccattt tcccgcaatg 120
 ctcgcaagct cctatagctt cccttcttcc cccgtacctc tcaccagcgg tgtcttcgggt 180
 atgtgaaaac ccaattcttc aaccctacag gatccaacag gcaatcacag ctggcatctt 240
 acctttatca cccttggttc tacaacaatc atcagcccta ttacatcagc tacctttgggt 300
 gcatttattg gcacaaaaca tcatggcaca acaactacaa caacttgtgc tagcaaacct 360
 tgctgcctac tctcagcaac agcagnttct tccattcaac caactagctg cattgaactc 420
 tgcttcttat ttgcaacaac 440

<210> 302
 <211> 341
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-046-Q1-K1-A9
 <400> 302

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gatatgacca agacagtgcg aagtgccttaa tgaagcaagc tggcaggaaa catttaaagc 120
tctttggatt tccacccttc gtcttgtaca acgggctaga gaacctcttg aaggaccgat 180
tcctcatcta gatgcaaggt tatgcatgtt gttagctctt ataccattat caattgctgc 240
gaatcttcaa gaggaaagtg atatgtttgg agttgaatgg aacaaaattc ttccacatag 300
acaagggctt atatcatctc tccagaatct gatcccatth t 341

<210> 303

<211> 418

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-046-Q1-K1-B1

<400> 303

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tttcttgcatt ttagccaatt ggccgcactg aacctctctg cttattttcca gcagcaaata 120
ctactaccat ttggccagct agctacaaca agccccactt tctttttgaa acaacaacaa 180
ttgcttccgt tctaccagca gtttgtggct aaccccgcaa ccctcttaca actgcaacag 240
ttgctgccct ttgtccaact tgctttgaca aaccagcag ccttctacca acaacacatc 300
attggcgggtg ccatctttta gattgcttat tagttgtaat tcaataatga agtttttttg 360
ctgatgtatg tggcctccta gaaataagaa gttacatttc caaattctaa tgtgtctat 418

<210> 304

<211> 431

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB3061-046-Q1-K1-B10

<400> 304

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gggggtcgtg gcgctggcgg cggtctctgc gtcggacgcg cagtggctgg agcggctgcc 180
ggagaagaag aagccgctgt acacgcacag cctgccgtgc atcgaggcgt ggctgcgcag 240
cctcgggttc acgcagtcgc gcgaggaccc ccgcgctctg ggtcgcgcag aagccgctct 300

ggcacgcgcg tctcaggcct cgatgtcacc gaccttcaca tcagggtactt gaaaaagcgg 360
 cctggganat ctgacaagga tatggagaag aagggttagc tacgccctaa gcagagaaga 420
 catcgagaac g 431

<210> 305
 <211> 442
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-046-Q1-K1-B11
 <400> 305

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 tgtagctaac accacaacca tgagcagcat catcactaca caacaacatc gtacactgat 180
 acatccacgt caacacacta tacataacta tcacttagac agcaagtaac taccaacaac 240
 atacatgcc a cactatgctg cctcaacagc atcagccatt acaagaaaga catgttcaac 300
 aactacatcg tcaaccgcag catcaacaac tacatgcact actacagaaa caacatcatc 360
 atcattgtca acgccatcat caacattacc atcaatcaca atgtactgtg cagcagcacg 420
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<210> 306
 <211> 380
 <212> DNA
 <213> Zea mays

<223> • Clone ID: LIB3061-046-Q1-K1-B12
 <400> 306

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 aggagaggcc gctcaagggc tccacgctcg tcaccgaagg cgcgatgaca gaagggtcag 180
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 gaacgtttct tgccgacacg agcggcgagg actccgacga gcttgccgtg gaggttctct 300
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380

<210> 307

<211> 365

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB3061-046-Q1-K1-B2

<400> 307

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gacagtgaag agtcatcatt taatgagagt ttgcccagg atgccttggc ttgcaattcc 180

tcaagggtgac attaagtgtc agacgctggt tcgttacttt gagcttagtt ctcttccaac 240

actagttctg attggccctg atgggaagac actgaacaac aatgtcgncg acttaattga 300

cgaccatggt tttagggcat gggagggtt ncccttcagt gctgagaagc tggaaattct 360

tgctg 365

<210> 308

<211> 409

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-046-Q1-K1-B4

<400> 308

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acaattttcc ctcaatgctc acaagctcct atagcttccc ttcttcccc ataccttcca 180

tcaatgatag cttcagtatg tgaaaaccca gctcttcagc cctataggct ccaacaagca 240

atcgagcaaa gcaacatacc tttatcacc ttgttggttc aacaatgcc agccctatct 300

ttggtgcagt cattggtaca aaccatcagg gcacagcagc tgcagcaact cgtgctacct 360

gtgatcaacc aagtagctct tgcaaacctt tctccctact ctcagcaac 409

<210> 309

<211> 444
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3061-046-Q1-K1-B5

 <400> 309

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 gttctggcag acgttccgtg gtactggcgc cgatcctttt ggtgcgccta caaagggttg 120
 gccttgggag gacggcacaa attcgttggc catggctaag agaagaatga gagctcactt 180
 tgagttcatg gagaagctgg gggttgacaa atgggtgcttc catgataggg atattgcccc 240
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 gcagctccag ggtgagacca atataaagcc attgtggggg actgcacagc tctttatgca 360
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<210> 310
 <211> 439
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3061-046-Q1-K1-B6

 <400> 310

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 acaagctcct atagcttccc ttcttcccc gtacctctca ccaacgggtg cttcggtatg 180
 tgaaaaccca attcttcaac cctacaggat ccaacaggca atcgagctg gcattctacc 240
 tttatcacc ttgttctcc aacaatcatc agccctatta cagcagttac ctttgggtgca 300
 tttattggca cataacatca tggcacaaca actacaacaa cttgtgctag caaaccttgc 360
 tgctactct cagcaacagc agtttctttc attcaaccaa ctagctgcat tgaactctgc 420
 ttcttatttg caacaacaa 439

<210> 311
 <211> 450
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-046-Q1-K1-B7

<400> 311

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gatttcgggt ccttatgctc cttgggtctgt ctgcaagtgc tgctactgcg accattttcc 120
cacaatgctc acaagctcct atagcttccc ttcttcccac gtacctctca ccaacagtgt 180
cttcggtatg tgaaaacca attcttcaac cctacatgat ccaacaggca atctcagctg 240
gcatctaacc tttatcaccc ttcttctctc aacaatcatc agccctatta catcacttac 300
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caaaccttgc tgcctactct cagtaacagc agttactttc attcaaccaa ctatctgcat 420
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<210> 312

<211> 390

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-046-Q1-K1-B8

<400> 312

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attatcgatt acatctcata tgtaatctaa aagatggcac ctccaacgat gggttgctgc 120
cacgacaagg cagggttcat caaagagaac tggctgtatg gtagcaattg ttgctgctgt 180
aggaaggcag tgaccaatgg gtaatgcacc tacatacctg caacaacaat tgctgcaaca 240
gattgtacca gctctgactc agctagctgt ggcaaaccct gctgcctact tgcaacagct 300
gcttccattc aaccaactga ctgtgtcgaa ctctgctgcg tacctacaac agcgacaaca 360
gctacttaat ccactaccaa tgcctaaccc 390

<210> 313

<211> 422

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-046-Q1-K1-B9

<400> 313

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attggactat ggggtgggcc gggaggatcg gcacaggaca tcacgacgac agaggcacca 120
aggcgtctga acagcgtcac cattcgcgcc ggtattgccg acgactcgat cgagttcact 180
tacactggca aggacaggca gaggcgcaca gctgggcat gggatggact tggcggcaat 240
gttcgaacga tcgatcttgg cgacaacgaa cacatcacgg aggtgtcagg aacgtacggc 300
acatttgaag gtgctactac cctaacctcg ctcaggttca tcaccagcac cagagcctga 360
ggcccatggg gcaccgagaa cgggacacgc ttgtgcatca ccgcgcacat cggcagcagc 420
gt 422

<210> 314

<211> 382

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-046-Q1-K1-A6

<400> 314

cgggaatgga cgcgtgcatc cacgcgtcca gaactacacc aatcgaaagt acctaactgc 60
gacttaactg caatgcctac cgtgatgtca gcttatgctg gcgcgttctt gctctatgtg 120
ctagcgcgaac aaatgcgttc attatttgac aatgctcact tgctcctagt gtcattatac 180
cacacttctt acgaccagtt acttcaatgt gctaaaaaca cctagttgag caagcctaca 240
tgctacaaca agcgcttgcg gcgagcgtct tacatcaacc aagtaactaa ttgcatcatc 300
aatcctagta acatctaacc atacagacca tctgttcaca ccagccacaa cagtacctac 360
cataactgag ccaactatat gt 382

<210> 315

<211> 431

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB3061-047-Q1-K1-A12

<400> 315

cccgactggt gaagattctt atcctgagcg accaggggaa ccagattgtc cttatttatt 60

gaatagtaga tgtaagttta aatctaaatg caagttcaac catccgaagg atatggtgaa 120
 tgcattagga acaggaacaa acaatgaatc tctaattgct gatagcgctg tcttaccagt 180
 gaggccttct gaaccattt gtgtgttcta tgcaaaaaca ggcaaatgca aatttggtgc 240
 catttgcaag ttcaatcatc caaaagatat taagacatca cctttgattg caaaggaaac 300
 catatataca gcaacaactg atgcagcaga tgccccgacc gaggcgtgta acgcanaggg 360
 gcttcctata agacaagggtg aagtggattg ctcgttttat atgaagacag gcagctgcaa 420
 atatggttct a 431

<210> 316
 <211> 383
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-047-Q1-K1-A2
 <400> 316

caatatggta cctaattcta cctcaaatgt tgctgataat aatatatcag cgtttccctc 60
 tggatcaaca tatctgcaaa gtccaatgta tggttgtctg gatgactctt ctgggtttatt 120
 gcaaaaataca ggagagaatg atccgacaac tagaactttt gttaagggtt acaagtcagg 180
 atcagtgggg agatccttgg acatcacccg gttctctaata tatgctgaac ttcgagagga 240
 actgggtcag atgttcggca ttaagggtca gttggacgac cctgatagat caggctggca 300
 gcttgtattt gtcgacaggg agaacgatgt gcttctcctt ggagacgacc cgtgggagtc 360
 atttgtgaat agtgtatggt aca 383

<210> 317
 <211> 437
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-047-Q1-K1-A3
 <400> 317

cgacgccacg cgtccaggcc acgcgattct aaaagaacaa gtgaacacca caagaatgga 60
 ttaggaaggt attattgggc aaccacaaga agaggattca agattggaac aagatgaaga 120
 tcctataatt gaaatgactg aacagagggt acatgtaaca acaagaaggt ctactgcac 180

aataatcaat caagataagg aagcaaagag gatgaagaag gattcttttg aaggacttgt 240
 tgggagatat ctagatctaa aatcaaaaca agttgaggat gaggttacac aaatggctaa 300
 aggaaaagaa tctgctcaag gcaatgactt ctccatcatg agatgcattt ctgttcttag 360
 atccatgaac gtgacaacag atgagaagat aaaagcagct gaagtgttcg acatacaaaa 420
 caacagagag accttta 437

<210> 318
 <211> 370
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-047-Q1-K1-A4

<400> 318

acagttccca ccctagtagg aacaggatca cagttgatgt aaccaactca tatgagcatt 60
 tccactgcca tggcgtgacc gtggctgtca catggcctgg tgctgaagcc cggggctcgt 120
 ttggatctcg aagcagcagg cacagcgatt cagatggagc agtgaactct ggccgagaca 180
 tcccagctga gaacagccag cacaattctg acgcaggcac cagtagacat ccaggcgata 240
 gagcatccac atcctggcct gacgaaaagt taccgtcagc caagagcagc cctggtcact 300
 gctcgtccga tctttgcatt ggagctatgg atgtccagcg ccggtctgcy tgggggttgg 360
 tgattgtcac 370

<210> 319
 <211> 410
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-047-Q1-K1-A5

<400> 319

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 ctaccaagat attagccctc cttgcgcttc ttgccctttt agtgagcgca acaaatgcgt 120
 tcattattcc acagtgtca cttgctccta gtgccattat tccacagttc ctcccaccag 180
 ttacttcaat gggcttcgaa catccagccg tgcaagccta caggctacaa ctagcgcttg 240
 cggcgagcgc cttacaacaa ccaattgccc aattgcaaca acaatccttg gcacatctaa 300

ccctacaaac cattgcaacg caacaacaac aacaacaaca gtttctgcca tctactgagcc 360
acctagccgt ggtgaaccct gtcacctact tgcaacagca gctgcttgca 410

<210> 320
<211> 438
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-047-Q1-K1-A6

<400> 320

caagcaacat agaaagtaga atccattagc aacaatagag caacaatggc gaccaagaga 60
ttttccctcc ttatgctcct tgctctttct acatgtgttg ctaacgcgac aattttccct 120
caatgctcac aagctcctat agcttccctt cttcccccat accttccatc aattatagct 180
tcagtatgtg aaaaccagc tcttcaacca tataggcttc aacaagcaat cgcagcaagc 240
aacatacctt tatcgccctt gttgtttcaa caatcaccag ccctatcttt ggtgcagtca 300
ttggtacaaa ccatcagggc acaacagctg cagcaactcg tgctacctgt gatcaaccaa 360
gtagctctgg caaacctttc tccctactct cagcaacaac aatttcttcc attcaaccaa 420
ctgtctacac tgaaccct 438

<210> 321
<211> 61
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-047-Q1-K1-A7

<400> 321

gaatccggtc gaccacgcgt ccgtatatct ccaagaatca ttaaggatgg cacgcaatac 60
a 61

<210> 322
<211> 255
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-047-Q1-K1-A8

<400> 322

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 caaaccttgc tgcatactct cagcaacatc agtttcttcc attcaaccaa ctggctgcat 120
 tgaactctgc tgcttatttg caacaacaat taccattcag ccagctagtt gctgactacc 180
 cccagcaatt tcttccattc aaccaactag cagcattgaa ctctgctgct tattttacagc 240
 agcaacaact actac 255

<210> 323
 <211> 431
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-047-Q1-K1-A9

<400> 323

gcagcataga aagcacaata gtgtaccatc aatggcagcc aaaatatttt gcctacttat 60
 gtccttgggt ctttctgcaa gtgctgtac ggcgaccatt ttcccgaat gctcgcaagc 120
 tcctatagct tcccttcttc ccccgtaact ctcaccagcg gtgtcttcgg tatgtgaaaa 180
 cccaattctt caaccctaca ggatccaaca ggcaatcgca gctggcatct tacctttatc 240
 acccttggtc ctccaacaat catcagccct attacaacag ttacctttgg tgcatttatt 300
 ggcacaaaac atcagggcac aacaactaca acatcttggtg ctagcaaacc ttgctgccta 360
 ctctcagcaa cagcagcttc ttccattcaa ccaactaggc tcattgaact ctgcttctta 420
 tttgcaacaa c 431

<210> 324
 <211> 400
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-047-Q1-K1-B1

<400> 324

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 cgccggggcg ttccgcgtcg actacgtcga gttcgacgtc caggtcacca aggacgggtg 120
 cccaatcatc ttccatgaca acttcatctt cacacaagac gatggtaaga tttcacaaaa 180
 gcgtgtggcc gatattcagc tggaagactt cctgcagtat gggctccaga acgagcaggg 240

gaaggttggc aagcccctgc ttcgcagatt gaaggatggc aggatggtga actgggacgt 300
gcaatcagag gacgctcttt gcacactcga agaagcggtc gacaagggtca atccaagggt 360
gggcttcaac gtccagctga aatttgacga cagtctttga 400

<210> 325
<211> 428
<212> DNA
<213> Zea mays
<223> Clone ID: LIB3061-047-Q1-K1-B10
<400> 325

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ctccttgctc tttctgcatg tgttgctaac gcgacaattt tccctcaatg ctcacaagct 120
cctatagctt cccttcttcc cccatacctt ccatcaatga tagcttcagt atgtgaaaac 180
ccagctcttc aaccctatag gtcccaacaa gcaatcgag caagcaacat acctttatca 240
cccttgtttc aacaatcgcc agccctatct ttggtgcagt cattggtaca aaccatcaag 300
gcacagcagc tgcagcaact cgtgctacct gtgatcaacc aagtagctct ggcaaaccct 360
tctccctact atcagcaaca acaatttctt ccattcaacc aactatctac actgaaccct 420
gctgctta 428

<210> 326
<211> 428
<212> DNA
<213> Zea mays
<223> Clone ID: LIB3061-047-Q1-K1-B11
<400> 326

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gctccgtggt ctttctgcaa gtgttgctac cggaaccatt tccccacaat gtcacaagc 120
tctatagct tcccttcttt cccatacct ctcaccagcg gtgccttcaa tgtgtgaaac 180
ccaattggt caaccctaca ggatccaaca ggcaatcgca tcaggcatct taccattatc 240
acccttgctc ctccaacaac cgtcagccct attacagcag ctacctttgg tccatttggt 300
ggcacaaaac atcacggcac agcagctaca acaacttggt ctagcaaacc ttgctgcata 360

ctctcagcaa catcagttgc ttacattcaa ccaactggct gcattgaact ctgctgctta 420
 ttgcaac 428

<210> 327
 <211> 429
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-047-Q1-K1-B12

<400> 327

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 gggtaacctc gattcctcgt cgacagcaag ctcgctcttc agacgctcga agccatcgtc 120
 gagcgcgcgc cgtccccgtg gttggtgtgt gtttcagatg cagagtttcg gaatactggg 180
 ctggagagat cagaggcgct gaaaaatgat ctggaatggg tcaggcaaca gggccacaca 240
 gttccagaac catcggtccc tggcaccaca tacgcttctc tactggaaga gctgtctgag 300
 gaggaccccc aggcctttat ctgccatttc tataacgtgt actttgctca tactgctgga 360
 ggccgaatga ttggcaaaaa ggtttccgag aagattctga acatcgaaga gctggagtgc 420
 tacaagtgg 429

<210> 328
 <211> 418
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-047-Q1-K1-B2

<400> 328

ccattttccc acaatgctca caagctccta tagcttcctt tcttcccccg tacctctcac 60
 gcagcgggtg ctccggtatg tgaaaaccca attcttcaac cctataggat ccaacaggca 120
 atcgcagctg gcatcttacc ttatcacccc ttgttctctc aacaatcctc agccctatta 180
 cagcagttac ctttggtgca ttatttgga caaaacatca gggcacaaca actacaacaa 240
 cttgtgctag caaaccttgc tgcctactct cagcaacaac agtttcttcc attcaaccaa 300
 ctagctgcat tgaactctgc ttcttatttg caacaacaac aactaccatt cagccagcta 360
 tctgctgcct acccccagca atttcttcca ttcaaccaac tgacagcttt gaactctt 418

<210> 329
 <211> 426
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3061-047-Q1-K1-A11

 <400> 329

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 ccatcgacat tccgtatgcg tgggtgagatg ctgtactgca cgtcgaagga ccgcatcaag 120
 tacgagctcg acggggtttca ctacgaaatc catgcgaccg acccattgta ggtggacatg 180
 gatgtttctcc gggagcgggc tcaactgaagc tggttctgct tttgaaggga cctgtggagg 240
 gccgtgaacc ttcaatcaga tgcgaatcta attgtcaacg atgaagcatc cgccgtgggtg 300
 cctgttaata agttcctgta agcgtatcat ttagtcgcta tgcttgatac tagctggcga 360
 agcgctatct aagctgaaaa cgaagcacga ttgcaaaact cgttatatcg cggtattgat 420
 gatact 426

<210> 330
 <211> 315
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3061-046-Q1-K1-G7

 <400> 330

cccacgcgtc cgggaaaatg gtcgccgtag cagcacttgc agaaatacca aggagcggaa 60
 ggaggcaaaa tattttcccg caatgctcac aagctcctat agcttccctt cttcccccg 120
 acctctcacc agcgggtgtct tcggtatgtg aaaacccaat tcttcaaccc tacaggatcc 180
 aacaggcaat cgcagctggc atcttacctt tatcaccctt gttcctccaa caatcatcag 240
 ccctattaca gcagttacct ttgggtgcatt tattggcaca aaacattcag cacaacaact 300
 acaacaactt gtgct 315

<210> 331
 <211> 443
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-046-Q1-K1-G8

<400> 331

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tcctacagcg gcaacccatg catcacagac atcacacata agtttttctt tatttgatg 120
cattactagc actaagactc tactaggtac cacatttaca ggttccaaat gctataccta 180
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ccatcctctc cttctctggg tctgaccttg ctttgctctc tagtgcaccc tgctccatga 360
ggtctacctc ctttcagatt gcaaggagag cattgagaag gtaatgctcg tcacccaaat 420
gcatgaaagc ctcttctaga aag 443

<210> 332

<211> 357

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-046-Q1-K1-G9

<400> 332

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gggacttgac tacatggatg ttgaagctct caagaaaatg aacaagaaca agaagcttgt 120
taagaggctt gccaagaaag tccatgcttt cttgggatca gaggccatca tcaagcagat 180
tccccgtctc cttggtcctg gtctcaacaa gggcaggcaa gttcccgacc ctggttactc 240
accaggaaat ccctcgagtc caaagtggaa cgagactaag gcaaccgtca agttccagct 300
caagaagggc ctttgcatgg gtgttcgccg tcgcaacttg gcgatggagg agaagca 357

<210> 333

<211> 407

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB3061-046-Q1-K1-H1

<400> 333

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 cgggtggattg gttttcctca tgggtcgac catcaagaag gccaagaagg ctcaatccaa 120
 gaagtccaag aagaaaactg aatcgctctc gtcgtccaac cctgcgattg cctctgggtcc 180
 ggctaaggtc tggcaaccgg gtgtagatac actggaagat ggggaggagc tgcagtttga 240
 tcctcaggct tacaattatc tccgagggtt tggcattggc tgggtcttgct tgagttttga 300
 tgttgtgcgt gatcaacttg gactcgctcg ttcagagtcc cctcatacat tctatgggtg 360
 tgctggaacg cangctgaga aagcttcatt gaactatatt ggcgttt 407

<210> 334
 <211> 302
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-046-Q1-K1-H10

<400> 334

gcttatttac agcagcaaca actactacca ttcagccagc tagctgggtg gagccctgct 60
 acgttcttga cacaaccaca attgttgccg ttctaccagc acgctgcgcc taacgctggc 120
 accctcttac aactgcaaca attgctgcca ttcaaccaac ttgctttgac aaaccaaca 180
 gcattctacc aacaacccat cattgggtgt gccctctttt agatttctta tgagttatag 240
 ttcaataata aagttttttg tctgatgttt gtggcttccc agaaataaga aagtacattt 300
 ct 302

<210> 335
 <211> 347
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-046-Q1-K1-H11

<400> 335

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 ccttatgctc cttggtcttt ctgcaagtgc tgctacggcg accattttcc cacaatgctc 120
 acaagctcct atagcttccc ttcttcccc gtacctctca ccaacgggtg cttcgggtatg 180
 tgaaaaccca attcttcaac cctacaggat ccaacaggca atcgagctg gcattctacc 240

tttatcaccc ttgttcctcc aacaatcatc agccctatta cagcagttac ctttggtgca 300
 ttattggca caaaacatca gggcacaaca actacaacaa cttgtgc 347

<210> 336
 <211> 322
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-046-Q1-K1-H12
 <400> 336

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 gctcacaagc tcctatagct tcccttcttc ccccatacct ctcaccagcg gtgtcttcaa 120
 tgtgtgaaac cccaattggt caaccctaca ggatccaaca ggcaatcgca acaggcatct 180
 taccattatc acccttggtc cttcaacaac cgtcagccct attacagcaa ttacctttgg 240
 tccatttggg ggcacaaaac cataaggcac aacaactaca acaacttgtg ctagcaaacc 300
 ttgctgcata ctctcagcaa ca 322

<210> 337
 <211> 456
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-046-Q1-K1-H2
 <400> 337

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 gtgctgateg tggccctggc tctcctggcg ctgctgcga gcgccgcctc cagtacaagc 120
 ggcggtgtg gctgccagac accaccgttt catctaccgc ctccgttcta tatgccgcct 180
 ccgttctatc tgccgccgca gcagcagccg cagccatggc aataccccac tcaaccaccg 240
 cagctaagcc cgtgccagca gttcggatcc tgccggcgcg gcagcgtcgg cagcccgttc 300
 ctggggcagt gcgtcgagtt cctgaggcac cagtgcagcc cgggggcgac gccctacggc 360
 tcgccacagt gccaggcgct gcagcagcag tgctgccacc agatcaggca ggtggagccg 420
 ctgcaccggt accaggcgac atacggtgtg gtccgtg 456

<210> 338

<211> 281
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB3061-046-Q1-K1-H3

 <400> 338

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 tgctgggttg tctgaaatga ctggctctgc cgataccatt aaaaanacagt gctaacgggc 120
 tcatatcacg tggaatgggt ccttgatatgt ttaaccaacc atggctaagg actggcataa 180
 caacattctt aaacacatca tgatacagca cagcgtgaac aatcctgtca caaacagatg 240
 agactctgaa cagatacact tataacacgg actacagaag c 281

<210> 339
 <211> 441
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3061-046-Q1-K1-H4

 <400> 339

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 tccttatgct ccttggtctt tctgcaagtg ctgctaccgc aaccattttc ccacaatgct 120
 cacaagctcc tatagcttcc tttcttcccc catacctctc accagcgggtg tcttcagtat 180
 gtgaaaaccc aattcttcaa ccctacagga tccaacaggc aatcgcagca ggcattctac 240
 ctttatcacc cttgttctc caacaaccgt cagccctatt acagcagtta cctttgggtgc 300
 atttgttggc acaaaacatc aaggcacaac aactacaaca acttgtgcta ggaaaccttg 360
 ctgcctactc tcagcaacag cagtttcttc cattcaacca actggctgca ttgaactctg 420
 ctgcttattt gcaacaacaa c 441

<210> 340
 <211> 391
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB3061-046-Q1-K1-H5

<400> 340

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acctccaatc tataatcctg cactcaatcc tttgatggcc cggcctccaa tttggcctgc 120
tgcaccagcg caagcttggg atccgcaaca agcagcatat ccacaacaat cagctgtttc 180
agttcctccc atagttgctg ggctcccacc acaacagcca ctattcccaa ttcagaatgt 240
gcctactcct atgacatcag cagctgctaa tgtacttcaa acatcgtttc ctatggcccc 300
tncaggagta ccttcacctn gtgcccctca tgtttcccag cctttgtttc ctgttaacac 360
tttagctgtc aatggagctg taaattcccc a 391

<210> 341

<211> 445

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-046-Q1-K1-H6

<400> 341

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aagacattat cctccttgc gcttcttgcc ctttttgtga gtgcaacaaa tgcgttcatt 120
attccacaat gtcacttgc tccgagtgcc attattccac agttcctccc tccagttact 180
tcaatggggt tcgaacaccc agctgtgcaa gcctataggc tacaacaagc gcttgcggcg 240
agcgtcttag aacaaccaat tgcccaatta caacaacaat ccttggcaca tctaaccata 300
caaaccatcg caacgcagca gcaacaagca ctgagccacc tagccgtggg gaaccctatc 360
gcctacttgc aacaacagct gcttgcattc aaccacttg ctttggcaaa cgtagctgca 420
taccaacaac aacaacagtt gcaac 445

<210> 342

<211> 442

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-046-Q1-K1-H7

<400> 342

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ccttatgctc cttggctctt ctgcaagtgc tgctaccgca accattttcc cacaatgctc 120
acaagctcct atagcttctt ttcttcccc atacctctca ccagcggcgt cttcagtatg 180
tgaaaaccca attcttcaac cctacaggat ccaacaggca atcgcagcaa gcatcttacc 240
tttatcacc ttgttctac aacaaccgtc agccctatta cagcagatac ctttgggtgca 300
ttcgttggca caaaacatca aggacaaca actacaaca cttgtgctag gaaaccttgc 360
tgactactct cagcaacagc agttacttgc attcaaccaa ctggctgcat tgaactctgc 420
tgcttatttg caacaacaac ta 442

<210> 343
<211> 437
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB3061-046-Q1-K1-H8
<400> 343

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cagcactgtc gactgataa gtctttctc atgtcatcgg caccatggat taaaattcca 180
ttaccattcg aatgggggtcc ttcaatattc actgctgggtc attcatttgg aatgatgggt 240
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ggtgctacac cacctacagc ttatgtcctt agtcggagcg ttggcttgca aggtattgga 360
atgtacttgg aggggatctt tagtgttcca gcaggttcat ctgtatcagt tgaaaacatt 420
ggcctncttg ggctgac 437

<210> 344
<211> 354
<212> DNA
<213> Zea mays
<223> Clone ID: LIB3061-046-Q1-K1-H9
<400> 344

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ctgccttatg ctcttgggtc tttctgcaag tgctgctacc gcaaccattt tcccacaatg 120

ctcacaagct cctatagctt cctttcttcc cccatacctc tcaccagcgg tgtcttcagt 180
atgtgaaaac ccaattcttc aaccctacag gatccaacag gcaatcgcag caggcatctt 240
acctttatca acccttggtc ctccaacaac cgtcagcccc tattacagca gttacctttg 300
gtgcatttgg ttggcacaaa acatcaaagc acaacaacta caacaacttg tgct 354

<210> 345
<211> 409
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-047-Q1-K1-A1

<400> 345

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tcccttcttc ccccgtaact ctcaccagcg gtgtcttcgg tatgtgaaaa cccaattctt 120
caaccctaca ggatccaaca ggcaatcaca gctggcatct tacctttatc acccttggtc 180
ctccaacaat catcagccct attacatcag ttacctttgg tgcatttatt ggcacaaaac 240
atcagggcac aacaactaca acaacttggt ctagcaaacc ttgctgccta ctctcagcaa 300
cagcagtttc ttccattcaa ccaactagct gcattgaact ctgcttctta tttgcaacaa 360
caacaactac cattcagcca gctacctgct gctaccccc agcaatttc 409

<210> 346
<211> 390
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-047-Q1-K1-A10

<400> 346

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cagccagcta gctgatgtga gccctgctgc cttcttgaca caacaacagt tgttgcogtt 180
ctacctgcac gctatgccta acgctggcac cctcttacia ctgcaacaat tgctgccatt 240
caaccaactt gctttgacaa actcaacagt gttctaccaa caacccatca ttggtggtgc 300
cctcttttag attgcttatg agttatagtt caataatgaa gttttttgga tgatgtttgt 360

ggcgtcccag aaataagaaa gtacatttct

390

<210> 347

<211> 104

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-046-Q1-K1-G6

<400> 347

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gccgaataat ggatgtgtga attctcacta attaagtaat gcat 104

<210> 348

<211> 359

<212> DNA

<213> Zea mays

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<400> 348

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gatacgtctc accagcgggtg tcttcaatgt gtgaaacccc aattgttcaa ccctacagga 120

tccaacaggc aatcacaaca cgcattctac cattatcacc cttgttcttc caacaaccgt 180

cagccctatt acagcagtta cctttggtcc atttggtggc aaaaacatc agggcacaac 240

aactacaaca actcgtgcta gcaaacctcg ctgcatactc tcagcaacat cagatgctta 300

cattcaacca actggctgcc tggaactctg ctgctcattt gcagcatcaa ttaccattc 359

<210> 349

<211> 116

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-046-Q1-K1-F12

<400> 349

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tttttgtctg atggtagtgg cttcccagaa ataagaaagt acatttctag attctt 116

<210> 350
 <211> 314
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB3061-046-Q1-K1-F2

<400> 350

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 agctcctata gccttccttc ttcccccgta cctctcacca gcggtgtctt cggtatgtga 180
 aaaccaatt cttcaaccct acaggatcca acaggcaatc gcagctggca tcttaccttt 240
 atcacccttg ttctacaac aatcatcagc cctattacaa cagntacctt tgggtgcattt 300
 attggcacia aaca 314

<210> 351
 <211> 293
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-046-Q1-K1-F3

<400> 351

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 atatgttccc tccttatgct ccttgcctt tetacatgtg ttgctaacgc gacaattttc 120
 cctcaatgct cacaagctcc tatagcttcc cttcttcccc cataccttcc atcaattata 180
 gcttcagtat gtgaaaacc agctcttcaa ccatataggc ttcaacaagc aatcgagca 240
 agcaacatac ctttatcgcc cttggtgttt caacaatcac cagccctatc ttt 293

<210> 352
 <211> 425
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-046-Q1-K1-F4

<400> 352

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ttcgggggtg ggcggatcga gatggcggcg tcggatgttg agtaccgctg cttcgtcggc 120
 ggcctcgcct gggccacgga cgaccactcc ctccacaacg ccttcagcac ctacggcgag 180
 gtcctcgagt ccaagatcat cctcgatcgg gagacgcaga ggtcccgcgg cttcggcttc 240
 gtcaccttct ccacggagga ggcgatgcgg aacgccatcg agggcatgaa cggcaaggag 300
 ctggacggcc ggaacatcac cgtcaacgag gccagtcctc gcggccgcgg ttgaagcggc 360
 ggctgcggct accgtggtgg ccgtggaggc ggcggtctac gcggtggctg gcgccgtgat 420
 ggcgg 425

<210> 353
 <211> 429
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-046-Q1-K1-F5

<400> 353

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 tcacccttgt tctccaaca atcatcagcc ctattacagc agttaccttt ggtgcattta 180
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 tactctcagc aacagcagtt tcttccattc aaccaactag ctgcattgaa ctctgcttct 300
 tatttgcaac aacaacaact accattcagc cagctatctg ctgcctaccc ccagcaattt 360
 cttccattca accaactgac agcattgaac tctcctgctt atttacagca gcaacaacta 420
 ctaccattc 429

<210> 354
 <211> 411
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-046-Q1-K1-F7

<400> 354

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cctcaatgct cacaagctcc tatagcttcc cttcttcccc cataccttcc atcaatgata 180
gcttcagtat gtgaaaaccc agctcttcag ccctataggc tccaacaagc aatcgagca 240
agcaacatac ctttatcacc cttgttgttt caacaatcgc cagccctatc tttggtgcag 300
tcattggtac aaaccatcag ggcacagcag ctgcagcaac tcgtgctacc tgtgatcaac 360
caagtagctc tggcaaacct ttctccctac tctcagcaac aacaatttct t 411

<210> 355
<211> 437
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB3061-046-Q1-K1-F8

<400> 355

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ccaagatact ttccctcctt atgctccttg ctctttctgc atgtgttgct aacgcgacaa 120
ttttccctca atgctcacia gtcctatag cttcccttct tccccatac cttccatcaa 180
tgatagcttc agtatgtgaa aaccagctc ttcaacccta taggctccaa caagcaatcg 240
cagcaagcaa cataccttta tcacccttgt ttcaacaatc gccagcccta tctttggtgc 300
agtcattggt acaaaccatc aaggcacagc agctgcagca actcgtgcta cctgtgatca 360
accaagtagc tctggcaaac ctttctccct actatcagca acaacaatnt cttccattca 420
accaactatc tacactg 437

<210> 356
<211> 426
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-046-Q1-K1-F9

<400> 356

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ggcggctgcg gctgccagcc accgccgccc gtccatctac cgccgcgggt gcattcgcca 180
ccttcgggtc acctgccacc tgcggtgcat ctgccaccgc cgggtccacct gccgcgcca 240

gtccacctgc caccgccggt ccatgtgccg ccgccggttc atctgccgcc gccaccatgc 300
 cactacccta ctcaaccgcc ccggcctcag cctcatcccc agccacaccc atgcccgtgc 360
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 atcctg 426

<210> 357
 <211> 437
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB3061-046-Q1-K1-G1

<400> 357

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 gtgccagtat tccacagttc ctcccaccag ttacttcaat gggcttcgaa catccagccg 180
 tgcaagccta caggctacaa ctagcgcttg cggcgagcgc cttacaacaa ccaattgccc 240
 aattgcaaca acaatccttg gcacatctaa cctacaaac cattgcaacg caacaacaac 300
 aacaacagtt tctgccatca ctgagccacc tagccgtggt gaacccttgt aactacttgc 360
 aacagcagct gcttgcatte aaccacttg ctentgcgaa cgtagctgca taccagcaac 420
 aacaacagct gcaacag 437

<210> 358
 <211> 412
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB3061-046-Q1-K1-G10

<400> 358

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 gccgatggcg cagcagtacg gcgcaccgnc tccgcagcag cctccggcga tgtggggcca 180
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gccggtgccg ggtgcaggcg ccagccgccc ccgctgcggc ggacgaggtc aggacgctct 300
 ggatcgggga cctgcaatac tggatggacg agaactacgt cttcgggtgc ttttcgaaca 360
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<210> 359
 <211> 329
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
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 <400> 359

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 ggggtttctg caagtgctgg tacggcgacc attttccac aatgctcaca agctcctata 120
 gcttaccttc ttccccgta cctctacca acggtgtctt ccgtatgtga aaaccaatt 180
 ctttaaccct acaggatcca acaggcaatc gcaactggca tcttaacttt atcacccttg 240
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<210> 360
 <211> 425
 <212> DNA
 <213> Zea mays
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 gtaggtcgag caggaaggaa cataacagag atcattcagg ctagtggtgc tcggatcaag 180
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 acaccgaag ctatccggac cgcgaggtcc atgatcatgc agagggtgac agccagttca 300
 gagaggtgat gagccccttc tgaaggaagg gcgtaggcca ttgctgtgac cgagcacagc 360
 agcgtgtttg atgcangtta ggaggatgtg ggaactgctt tccttttatt ttcccgctt 420

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425

<210> 361
<211> 429
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-046-Q1-K1-G2

<400> 361

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ccagactctc aagtacaaca tgaagtcgag ggctgggaga ggatttacc ttgaggagct 180
gaaggctgcc ggcattccaa agaagcttgc cccaaccatt ggcatttctg tggatcacca 240
ccgcaagaac aaatatctcg agggactgca ggccaatgtc cagaggctta agacgtacaa 300
ggccaagctg gttatcttcc caaggcgtgc tcgcaaggcc aatgccggcg actctactcc 360
ggaggagctt gccacggcca cccagggtcca gggcgactac atgcctatta ctcgtggtga 420
gaagcgctc 429

<210> 362
<211> 355
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-046-Q1-K1-G3

<400> 362

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ctcaatgtc acaagctcct atagcttccc ttcttcccc atacctcca tcaattatag 180
cttcagtatg tgaaaaccca gctcttcaac catataggct tcaacaagca atcgcagcaa 240
gcaacatacc tttatcgccc ttgttgtttc aacaatcacc agccctatct ttgggtgcagt 300
cattggtaca aaccatcagg gcacaacagc tgcagcaact cgtgctacct gtgat 355

<210> 363
<211> 255

<212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-046-Q1-K1-G4
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 gcaagcttga cagcagcaca atacctacca tcaatgtgcg gcttgtagca ctcatactac 120
 caaaataatc catgcagcag caatgacatt agtgggtgttt gcaattgaag aattgtgtct 180
 acctagccgt tataactcata taacggtgtt aagcaataaa gtaccatata ttatgatgtt 240
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<210> 364
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 <212> DNA
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 <223> Clone ID: LIB3061-046-Q1-K1-G5
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 gttccgaggc accagctgcc cagcgatctg cttgctgcgg ctcataagca gatgcacgat 360
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 <223> Clone ID: LIB3061-046-Q1-K1-F10
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 caacaaccaa ttgcccaatt gcaacaacaa tccttggcac atctaacaat acaaaccatc 240
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 gtcgcctact tgcaacagca gctgcttgca tccaaccac ttgctctaac caacgtaagt 360
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<210> 366
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 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-045-Q1-K1-C7
 <400> 366

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<210> 367
 <211> 401
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-045-Q1-K1-C8
 <400> 367

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agcgccggga cctcctgcgt gccgggggtgg gccatcccgc acaaccgct cccgagctgc 180
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gaagaggaga tgctgccggg agctggcgga catcccggcg tactgccggt gcacggcgct 300
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<210> 368

<211> 418

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-045-Q1-K1-C9

<400> 368

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atgctcacia gctcctatag ctcccttct tccccgtac ctctcaccag cgggtgtcttc 180
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ggtgcattta ttggcacaaa acatcagggc acaacaacta caacaacttg tgctagcaaa 360
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<210> 369

<211> 400

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-045-Q1-K1-D1

<400> 369

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caagctcgtg gacaagctgg aggccgagga taaggaaaag gtggaggagg ccctcaagga 120
tgctctggag tgtctggacg acaaccagtc cgccgagaag gacgactacc aagagaagct 180
tatggatgtg gaggccgggt gcaaccacat tgtgtctacc gtgtaccact ggtctaacag 240
tgccccctggc cttgacactg acagcgggtg tgacgacgac cactactagc tgtagatggt 300

tgtagatggg actgggtcacg tgaattgccca tatgccgaac cacaattagt aacgggggttt 360
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<210> 370
<211> 409
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-045-Q1-K1-D10

<400> 370

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taccaccggc aatatcttac attcaaccaa ctggcagcat tgaactctca tgcttatgta 180
caacaacaac aactactacc attcagccag ctagctgctg tgagccctgc tgccttcttg 240
acacagcaac atttggtgcc gttctacctg cacactgcgc ctaacgttgg caccctctta 300
caactgcaac aattgctgcc attcgaccaa cttgctttga caaaccagc agtgttctac 360
caacaacca tcattggtgg tgccatcttt tagattgctt atgagttat 409

<210> 371
<211> 262
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-045-Q1-K1-D11

<400> 371

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ttgcgtcctt atgctccttg gtctttctgc aagtgttgct accgcaacca ttttcccaca 120
atgctcacia gtcctatag ctcccttct tccccatac ctctcaccag cgggtgtcttc 180
aatgtgtgaa aacccaattg ttcaacccta caggatccaa caggcaatcg caacaggcat 240
cttaccatta tcacccttgt tc 262

<210> 372
<211> 411
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-045-Q1-K1-D12

<400> 372

gacagacagt gttattggtg aaggatgtgt tattaataaac tgcaagataa accattctgt 60
agttggactc cgatcttgca tatctgaagg tgctatcata gaggacagtt tactaatggg 120
tgcggtactac tatgagacag aagctgataa aaaactcctt gccgaaaaag gtggcattcc 180
tattggtatt gggaaaaatt catgcatcag gagagcaatc attgacaaga atgctcgaat 240
tgagagacaat gttaagatac tcaatgctga caatgttcaa gaagctgcaa gggagacaga 300
cgggtacttc atcaaagggtg gaattgtcac agtgatcaag gatgctttac tccctagtgg 360
aacagttata tgaagtgaac gtgcgacatg cagctgtgtg tctcgacatt c 411

<210> 373

<211> 368

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-045-Q1-K1-D2

<400> 373

caaattgcat gtaaaaaaaaa aagaaccgta ggaccctgtc tttgcgcggg gtcctggcgt 60
cctgccgctg ccagagcgaa ggaccctgtc tttgccagaa atgcccctgg gcaaccaagc 120
taatggcgac tttgtttgaa caaaaagtag cagacttttt tgccgggggttc gatttctctc 180
tctctctttt ttcttttgta attgtaaccc tttttttacc tttctggact ggtataaaag 240
taagcctgga ctgcgtcagtt tatgggtgca atatggagga gtatctttgt gtagaatatt 300
ctggctggta ctgcgcttcg gactttgtat ataaagaaga actattatta gtctgggtgt 360
ttggattt 368

<210> 374

<211> 437

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB3061-045-Q1-K1-D3

<400> 374

gcaaagcggc agtgcgtaga gaggatcgtc gaacagaaca gcatgaagat ggtcatcggt 60
ctcgtcgtgt gcctggctct gtcagctgcc agcgcctctg caatgcagat gccctgcccc 120
tgcgcggggc tgcagggctt gtacggcgct ggcgccggcc tgacgacgat gatgggcgcc 180
ggcggggtgt acccctacgc ggagtacctg aggcagccgc agtgcagccc gctggcgggc 240
gcgcctact acgccgggtg tgggcagacg agcgccatgt accagccgct ccggcaacag 300
tgctgccagc agcagatgag gatgatggac gtgcagtccg tcgcgcagca gctgcagatg 360
atgatgcagc ttgagcgtgc cgctgccgnc agcagcagcc tgtacgagcc agctctgatg 420
cagcagcagc agcagct 437

<210> 375
<211> 356
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-045-Q1-K1-D4

<400> 375

cacgcgtccg caaaagccac agggcataaa aagaatttta caacattaca tcatcacgat 60
gttcatgcgt cttgcgcctt ccctagctat ataacctgcc atcgccctcaa aaatccatat 120
gcaatcacc taatcgcgac tttatttcat caacaactct cacactcttc tgacgactat 180
gatactctct ctctatctgt acccctacaa ttagtacctt atgcatacct atctcaacct 240
cgttacaact acaccctaata acgcacagtt tatgcataca atcgccatga accactctct 300
gcagaatcat ttctatcata ctgagattac gactatggac atacagaaca actatc 356

<210> 376
<211> 432
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-045-Q1-K1-D5

<400> 376

cccacgcgtc cgagtagctg ccaggtattg caccaacaat gttgtcatga tcttaggcag 60
attgagccac attacattca ccaagcaatc tacaacatgg ttcaatccat aatgcaggag 120
gagcaacaac aacaaccatg tgagttatgt ggatctcaac aagctactca aagtgcggtg 180

gcaatcttga cagcagcaca atacctacca tcaatgtgcg gcttgtacca ctcatactac 240
 ctaaataatg catgcagcag caatgacatt agtgggtgttt gcaattgaag aattgcgtct 300
 acctagccga tatactcata taacggagtt aagcaataaa gtaccatata ttatgatgta 360
 tgtactaaca aaatagccgt ggtgtacctt gaaacatcct tgtaacttca gctgcttgca 420
 ttatatgcac tt 432

<210> 377
 <211> 433
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-045-Q1-K1-D6

<400> 377

ggttcgtgag gttctccggg gttcggtttc gtgggtgagc ggatcgagat ggcggcgctcg 60
 gatgttgagt accgctgctt cgtcggcggc ctgcctggg ccacggacga ccaactccctc 120
 cacaacgcct tcagcaccta cggcgaggtc ctcgagtcca agatcatcct cgatcgggag 180
 acgcagaggt cccgcggtt cggcttcgtc accttctcca cggaggaggc gatgcggaac 240
 gccatcgagg gcatgaacgg caaggagctg gacggccgca acatcacctg caacgaggcc 300
 cagtcccgcg gcggccgtgg aggcggcggc ggcggcgggt acggtggtgg ccgtggaggc 360
 ggcggtacg gcggtggcgg gcgccgtgat ggcggcggcg gctacggcgg tggcggcggc 420
 taccctggtt ggc 433

<210> 378
 <211> 434
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-045-Q1-K1-D7

<400> 378

gcaacataga aagcacaata gtgtaccaac aatggcagcc aaaatatattt gcctccggat 60
 gtccttggt ctttctgcaa gtgctgtac ggcgaccatt ttcccgcaat gctcgcaage 120
 tectatagct tcccttcttc ccccgtaact ctaccagcg gtgtcttcgg tatgtgaaaa 180
 cccaattctt caaccctaca ggatccaaca ggcaatcgca gctggcatct tacctttatc 240

acccttggtc ctccaacaat catcagccct attacaacag ttacctttgg tgcatttatt 300
ggcacaaaac atcagggcac aacaactaca acaacttggtg ctagcaaacc ttgctgccta 360
ctctcagcaa cagcagtttc ttccattcaa ccaactaggt tcattgaact ctgcttctta 420
tttgcaacaa caac 434

<210> 379
<211> 442
<212> DNA
<213> Zea mays
<223> Clone ID: LIB3061-045-Q1-K1-D8
<400> 379

cagaaagacc aaggagcata aggaagcaac cattttccca caatgctcac aagctcctat 60
agcttccttt cttcccccac acctctcacc agcggtgtct tcagtatgtg aaaacccaat 120
tcttcaaccc tacaggatcc aacaggcaat cgcagcaggc atcttacctt tatcacccctt 180
gttcctccaa caaccgtcag ccctattaca gcagttacct ttggtgcatt tgttggcaca 240
aaacatcaag gcacaacaac tacaacaact tgtgctagga aaccttgctg cctactctca 300
gcaacagcag tttcttccat tcaaccaact ggctgcattg aactctgctg cttatttgca 360
acaccaacta ccattcagtc agctagctgc tgcctacccc cagcaatttc ttccattcaa 420
ccaactggca gcattgaact ct 442

<210> 380
<211> 437
<212> DNA
<213> Zea mays
<223> Clone ID: LIB3061-045-Q1-K1-E1
<400> 380

accaactagc aacatagaaa gcaaatagt gtaccaacaa tggcagccaa aatattttgc 60
ctcctgatgc tccttgggtc ttctgcaagt gctgctacgg cgaccatttt cccgcaatgc 120
tcgcaagctc ctatagcttc ccttcttccc ccgtacctct caccagcggg gtcttcggta 180
tgtgaaaacc caattcttca accctacagg atccaacagg caatcgcagc tggcatctta 240
cctttatcac ccttggtcct ccaacaatca tcagccctat tacaacagtt acctttgggtg 300

catttattgg cacaaaacat cagggcacaa caactacaac aacttgtgct agcaaaccctt 360
gctgcctact ctgagcaaca gcagtttctt ccattcaacc aactagggtc attgaactct 420
gcttcttatt tgcaaca 437

<210> 381
<211> 406
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB3061-045-Q1-K1-C6
<400> 381

gtcaattacc aagatccacg cctgtctgcc acttctgttg ctcaaacagc aacatatgca 60
cctccccag cttcatatcc cccttcaata tcttatgcac agtttgcaac cccccagtca 120
attcagcata gcaattctgt ggcttcaccg agcaatgggc agattgcaaa tcaagcacia 180
atgaatgtga atcaacaacc aaaagattct tcggcagcat ctagcagacc atactacata 240
cctgataatc tattcagtga tttgatcgat gcanaaagtt ttggcggtgg aaacaagatg 300
ggcgggcccc ctacaatggg tagctcaaat ggtggccagc ctatgattgg tggaaagaaa 360
tagggttatt tgtctatata tatacagctg atgggtgatcg gtagct 406

<210> 382
<211> 252
<212> DNA
<213> Zea mays
<223> Clone ID: LIB3061-045-Q1-K1-B2
<400> 382

aatacaaac caggtaaaca tgcagtttag ccataacaaa cattttttgc ttacaacaat 60
ctgctcattt ttttcctggc aaatcactcg gtgtattaaa aacttttaaag ctatgtaatt 120
gaaagactaa tcaacacgca gtttaaccat gagcaagctt tgtttaatta ttacagtcta 180
cgagtactta ttcaggcaga tcaactctgag gttgtgcta ctggtgggcc cttccagctt 240
gaccttggtg gt 252

<210> 383
<211> 403

<212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-045-Q1-K1-B3
 <400> 383

ctgccacctc cggttcacct gccacctccg gtgcatctcc caccgccggt ccacctggcg 60
 ccgccgggtcc acctgccacc gccgggtccat gtgcgcgccg cggttcatct gccgccgcca 120
 ccatgccact accctactca accgccccgg cctcagcctc atccccagcc acacccatgc 180
 ccgtgccaac agccgcatcc aagcccgtgc cagctgcagg gaacctgcgg cgttggcagc 240
 accccgatcc tggggcagtg cgtcgagttc ctgaggcatc agtgcagccc gacggcgacg 300
 ccctactgct cgcctcagtg ccagtcgttg cggcagcagt gttgccagca gctcaggcag 360
 gtggagccgc agcaccggta ccaggcgatc ttcggcttgg tcc 403

<210> 384
 <211> 446
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB3061-045-Q1-K1-B4
 <400> 384

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 caggcgagga tcggagttgc tctgaattga ctgaaccatg gcggcgacaa tggcagtgac 120
 gacgatggtg accaggagca aggagagctg gtcgtcattg cagggtcccgg cgggtggcatt 180
 cccttgaag ccacgaggcg gtggcaagac cggcggcctc gagttccctc gccggggcgat 240
 gttcgccagc gtcggcctca acgtgtgccc gggcgtcccg gcggggcgcg acccgcggga 300
 gcccgatccc aaggctgtac gggcccngc acaactgcga catcgcgcg cagcttggcg 360
 ccgncgttcc cgggcagcag gccgncgtgg aggcggagga agaggcagcg aagaggagga 420
 agcagaaagg cggcggcagc aagaag 446

<210> 385
 <211> 433
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB3061-045-Q1-K1-B5

<400> 385

cccacgcgtc cgattttgag cattcagaaa cacaccaagc gaagcacagt agcaacagcc 60
taacaacaat ggctaccaag atattatccc tccttgcgct tcttgcgctt tttgcgagcg 120
caacaaatgc gttcattatt ccacaatgct cacttgctcc aagttccatt attacacagt 180
tcctcccacc agttacttca atgggcttcg aacaccacgc tgtgcaagcc tataggctac 240
aacaagcaat tgcggcgagc gtcttacaac aaccaatttc ccagttgcaa caacaatcct 300
tggcacatct aacaatacaa accatcgcaa cgcaacagca acaacaattc ctaccagcac 360
tgagccacct agccatgggtg aaccctgccg nctacttgca acagcagttg cttgcatcaa 420
accacttgc tct 433

<210> 386
<211> 422
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-045-Q1-K1-B6

<400> 386

gtttcccccc gttccaaatt cgccaaccca caccaccttc ctctctctgg ccgccggcct 60
cagatcagat caaagcggaa caccaactcc tcctcctcgt aggggtttggt gtgttcacct 120
cacctctcgc ggcgacggcg aagccttctc ttctcttcgc tccgctccgc tccgctcggt 180
gtttcagcca tgatgtcgcg gtcgtacacc aacctgctcg acctcgcgga gggcaacttc 240
gcggcgctgg gcccggccgc cggcgccggc ggcggcgggc ggcagaggca ggggtcgttc 300
gggctgaggg ggatgtcgcg ggtgatgacg gtgccgggga cgctctcgga gctcgacggc 360
gaggacgagt cggagccggc ggccaccagc agcgtcgcct tcgacgcgcc ctcgctccgtg 420
gc 422

<210> 387
<211> 434
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-045-Q1-K1-B7

<400> 387

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aaccctgctg cttatttgca gcaacaacta ttaccattca gccagctagc tactgcctac 120
tctcatcaac aacaacttct tccatttaac caattggccg cactgaacct cgctgcttat 180
ttgcagcagc aaatattact accatttagc cagctagctg cagcaagccg tgcttccttc 240
ttgacacagc aacagttgct gcctttctac cagcagtttg cggctaacct cgcaaccttc 300
ttacaactac aacaattggt gccctttgtc caacttgctt tgacaaacct agcagcctcc 360
taccaacaac acatcattgg tggcgccctc ttttagattg cttattagtt gtaattcaat 420
aataaagttt ttg 434

<210> 388

<211> 429

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB3061-045-Q1-K1-B8

<400> 388

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tgatattgct gcatgccttc aagcacgtca gcctctgtgg cttatatctg aggcatcaac 120
tgcttcatcg gcattactat gaggggttaa ttatgctcca atttctacaa gttggccgat 180
gaaatttcat tagttgggtt tattcaaaag tattgtctga ttcttagaag aacacaatag 240
cgggctgatg ctttggtcac tataactgag ttctttcaca ggaattaatc agatgctcct 300
ggttaactgg gatgcgcgtt ttgaagcttg tttactgcat cgtatgtttc ttggccaata 360
tcttactcta cttttcactc gtgtgaaatt tccaagtgcg tgctcctact tcaatattgn 420
gaatctttg 429

<210> 389

<211> 409

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-045-Q1-K1-B9

<400> 389

aatccattag caacaattta gcatcaatgt cgaccaagat attttccggt gttatgcgcc 60
ttgctctttc tacatgagtt gctaacgcga catttttccc tcaatgctca cacgctccta 120
taactaccct tgtttcccca taccttacac caattatagc ttcagtatgt gaaaacccag 180
ctcttcaacc atataggcta caccaagcaa tctcagcacg caacatacct ttatcgctct 240
tgctgtttca acattcacca gccctatctt cggagcactc attggcacia accatcaggg 300
cacaacagct gcaacaactc gtgctacctg tgaacaacca agtatctctg gcaaaccctt 360
ctcactactc tcagcaacaa caatttttta catacaacca actgtctac 409

<210> 390

<211> 414

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-045-Q1-K1-C10

<400> 390

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aaacttgccc ctactgagc agccttccaa gtttgatttt tatgatccaa aaacaccttt 120
cttcaactgca ccccgatgct tgctccgac gcaattggac aagtgaaga tgaaagatgc 180
atztatctca gatggttgct tactgagaga atgcaacatc gagcattctg tgattggagt 240
ctgctcacgt gtcagctctg gatgtgaact caaggactcc gtgatgatgg gagcggacac 300
ctatgaaact gaagaagaag cttcaaagct actgttagct gggaagggtcc cagttggaat 360
aggaaggaac acaaagataa ggaactgtat cattgacatg aatgctaaga ttgg 414

<210> 391

<211> 416

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-045-Q1-K1-C11

<400> 391

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aatagaacgt gaggagcacc tgatggcagc ttttacctac ttcgacaaag atggaagtgg 120

ttatatcaca gttgacaagc tgcaacgagc ttgtggagaa catgacatgg atgacacttt 180
ccttgaagag ataatttttag aagttgacca aaacaatgac ggtcagattg actacgccga 240
attcgtagcc atgatgcaag gcagcaaagt tggacttggg tggcaacaaa tggaaaccac 300
tctgaatgta accttgagag atgcacctca agtacactgt cactgatgcg ctgcgccatgt 360
acagattttg ctctcttctc gtgttcatcg tttctccaca cgacctgaga gttccg 416

<210> 392

<211> 415

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-045-Q1-K1-C12

<400> 392

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ctccttggtc tttctgcaag tgctgctacc gcaaccattt tcccacaatg ctccacaagct 120
cctatagctt cctttcttcc cccatacctc tcaccagcgg tgtcttcagt atgtgaaaac 180
ccaattcttc aaccctacag gatccaacag gcaatcgcag caggcatctt acctttatca 240
cccttgttcc tccaacaacc gtcagcccta ttacagcagt tacctttggt gcatttggtg 300
gcacaaaaca tcaaggcaca acaactacaa caacttggtc taggaaacct tgctgcctac 360
tctcagcaac agcagtttct tccattcaac caactggctg cattgaactc tgctg 415

<210> 393

<211> 421

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-045-Q1-K1-C2

<400> 393

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ccatcgctgc cgatcatatg gccgggataa aggaccagaa ggacccccgt gacaagggtcc 120
accacggcgg atggatggcc aagatcttct gctgggtcgt cattgtcttc ctcatgttct 180
tcgtgcccaa cggcgtcgtc agcttctatg aatctatatc caagtttggc tctgggctgt 240
tccttctcgt tcaggttgtt ctgctgttgg attttgtgca cggatggaat gagaactggg 300

tcgccaagga tgagcagttc tggtagatgg ctctgttggg tgtctcggtt gtctgttaca 360
 ttgccacggt ctgtttctcg ggtcttctat ttactgggt cactccatct ggacatgact 420
 g 421

<210> 394
 <211> 433
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-045-Q1-K1-C3
 <400> 394

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 agcctgggtg tctttatcca gctgtctctg ttgagcagtt tcacgaaccc catgcttata 120
 agtaacttca tgcttgcata tctccttaca tttaggttga atttcctatc aatcaaccgg 180
 tttgagagga aaaagaatct tgatcttgcc atttcagcat ttgctttgct ccgttctgct 240
 gcttggaacta tacctgggtga tgctctacaa gaagcaacat taacagtggc aggtggctat 300
 gataagcgtc tcaaggaaaa tgttgaatac cttgaggaac tcaaaagact cgcattgacg 360
 gaaggggttt ctggacaggt taaatttggt acatcttgct caacatctga aagaaacgag 420
 cttctctcca act 433

<210> 395
 <211> 374
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-045-Q1-K1-C4
 <400> 395

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 accattcgcg tctttaatac atctgtgatt aatgaccaga ttcaccaacc tcacacttat 120
 caccaccttc attctatcat ctatatctac atctaggtcg aaattgctat ccttaaactc 180
 ttctttacac aaaacataat cttcatctat caatctatat tcaactttgc tctgatctgc 240
 tccttcaacta taccttggtt tgctgtacaa taatctacac taatagaatc aaaacctcta 300
 tcatccaagg attaacagat atgttacata cctctattaa ctgactcgac tgtcttttac 360

attaacactt tctg

374

<210> 396

<211> 432

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-045-Q1-K1-C5

<400> 396

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gaggggtgttg ctcggtgccc tcgctctcct ggctctcgct gcgagcgcca cctccacgca 120
tacaagcggc ggctgcggct gccagccacc gccgccggtt catctaccgc cgccggtgca 180
tctgccacct ccggttcacc tgccacctcc ggtgcatctc ccaccgccgg tccacctgcc 240
gccgccggtc cacctgccac cgccggtcca tgtgccgccc ccggttcata tgccgccgcc 300
accatgccac taccctactc aaccgccccg gcctcagcct catccccagc cacacccatg 360
cccgtgcaa cagccgcata caagcccgtg ccagctgcag ggaacctgcg gcgttggcag 420
caccgccatc ct 432

<210> 397

<211> 412

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-045-Q1-K1-B12

<400> 397

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tctaagatgt cgatcatctga acggcgggtac cttcgaaaga gattccgggc agagcttgat 120
tcggtgcggg atctcctcaa gaagccagag tttgcagccc ctgttcctct caatcgggca 180
cctgctttgt catcctcagc tgcacctcga gctaagaagc cacagaagtc tcagcgtggt 240
gggaccaatg ttatacgtgg tgcaaaggga cgattcttgc ctacaaaacc gcggccggag 300
acttcactg tgttatctga agctgcagcg ttttaagcagt gtgaagctat tttgaagaag 360
cttatgactc aaaagtatag tcatatattc aatgttccag ttgatattgt ga 412

<210> 398

<211> 419
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB3061-044-Q1-K1-H9

 <400> 398

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 ttccacaatg ctcacttgct ccaagttcca ttattacaca gttcctccca ccagttactt 180
 caatgggctt cgaacaccca gctgtgcaag cctataggct acaacaagca attgcgggcga 240
 gcgtcttaca acaaccaatt tcccagttgc aacaacaatc cttggcacat ctaacaatac 300
 aaaccatcgc aacgcaacag caacaacaat tctaccagc actgagccac ctagccatgg 360
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<210> 399
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 <213> Zea mays

 <223> Clone ID: LIB3061-045-Q1-K1-A1

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 aaattatttc catgttctgc gtcgccagat acaccgggac tttaggaaac ctttgattgt 180
 gatgtcccca aagaacctcc ttcgccacaa ggactgcaag tcgaacttat ctgaatttga 240
 tgatcttgcg ggccaccctg gattcgacaa gcaagggaca cgcttcaagc ggctcattaa 300
 agaccagaat aatcacaagg acctcgagga gggaattaac cgtctagtgc tttgctctgg 360
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 atgtagagtt g 431

<210> 400
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 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-045-Q1-K1-A10

<400> 400

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aggaggcaag agagatcatt cttaaagaca tgcccaacgc taacattcaa gttctaccgg 180
ttggctcgct tgtgacccaa gactttcgcc ctgatcgtgt tcgcatcttc gttgatattg 240
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aagcctactt ttatgtatca tggctaataa atcctacatt tcttggttat ccttgattgg 360
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<210> 401

<211> 391

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-045-Q1-K1-A11

<400> 401

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accgtggaaa ttcagtaaag cgaatgcaac agagaaggcg atggttgctg gtttgggagg 180
actcaatctc tttggtgtca tcattcttgg aaacttgttg aagcatatga cagtgcaccc 240
tgggtggacta atctcatttg ccgcacagtt atatcctttg cttcagatat acgctggctc 300
cttttttgca atacctttgt ttagatgggt tctgctacgc aagaccatca atggcattaa 360
aaagaggaat aaggccagag aacagagagc t 391

<210> 402

<211> 396

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-045-Q1-K1-A12

<400> 402

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accacagttg ttgccgttct accagcacgc tgcgcctaac gctggcaccc tcttacaact 120
gcaacaattg ctgccattca accaacttgc tttgacaaac ccagcagcgt tctaccaaca 180
acccatcatt ggtggtgccc tcttttagat ttcttatgag ttatagttca ataataaagt 240
tttttgtctg atgtttgtgg cttcccagaa ataagaaagt acatttctaa aaaaaaata 300
aaatataaaa atacatatgg aaaaaaaaaa aaaagataca caaaaacaac aataaaaatta 360
aaaaaaaata ataaagacaa aaaacaaaag agtca 396

<210> 403
<211> 347
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB3061-045-Q1-K1-A2
<400> 403

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gtctcgccgt ggcttgccgt gctcgggtgtg gccatgctct ccgtctgggc catcacgctc 120
gccatcttcc tctgtggcga cagctcagac aacccgagac caccaagata caatcctgcc 180
gttagtgccg ctatagcagc tgggtggcga gggggctgtg gtggcggtgg cggtggtggt 240
ggagggggct gtggtggctg atgcgggtgtg ggagggggct gtcgcagccg cngcagcagc 300
ggatgctaga gttcatcgga tccgatgcac cagcgggcag cggcac 347

<210> 404
<211> 434
<212> DNA
<213> Zea mays
<223> Clone ID: LIB3061-045-Q1-K1-A3
<400> 404

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gccgccggc gccggcgccg cctgacgacc cgggtcccga gcctcccagc ccccgccgcc 180
cccgccggc ccggcgagc ggctccctct cctcctctca ccagaagccg gagcatgatg 240

ttccagggca ccaaagggat cacgctgctg cagccaagcc tccggggcca gtcggaaagg 300
cagcagggct tcttcacacg gcctccagcg cagggctttt tcaccaccgc agcacgtcgg 360
agtcggacca cggccggctt tccgacgccg tgcagcaggc cagggaacgg ctccttcaga 420
ggctcggcag cgtg 434

<210> 405
<211> 452
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB3061-045-Q1-K1-A4
<400> 405

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cctcaatgct cacaagctcc tatagcttcc cttcttcccc cataccttcc atcaatgata 180
gcttcagtat gtgaaaaccc agctcttcag ccctataggc tccaacaagc aatcgcagca 240
agcaacatac ctttatcacc cttgttgttt caacaatcgc cagccctatc tttggtgcag 300
tcattggtac aaaccatcag ggcacagcag ctgcagcaac tcgtgctacc tgtgatcaac 360
caagtagctc ttggcaacct ttntcctac tctcaggcac cacattttct tccattcaac 420
caactgtcta cactgaaccc tgctgcttat tt 452

<210> 406
<211> 454
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB3061-045-Q1-K1-A5
<400> 406

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tctagagctg ttattttctaa aggaggacgg gcgattgcgg tttcaaggga tcacaaacct 120
gatcagacag atgagaggca aagaattgag gatgcagggg gctttgttat gtgggctggg 180
acatggagag tgggtggcgt tctcgtgtc tctcgagcat ttggtgataa actcttgaag 240

ccgtatgttg ttgctgaccc tgaaatcaag gaggagggtg tgcacagctc cctcgaattc 300
ctcatccttg ctagcgacgg actctgggat gttgtcacta atgaggaagc tgttgccatg 360
gtcaagccta tccaggaccc ccaggaagca gcaaacaagc ttctcgaaga agcttcccgga 420
aggggaagct ccgataacat cacagntatc atcg 454

<210> 407
<211> 422
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-045-Q1-K1-A6

<400> 407

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cagggaaacg tcaagcagtt gacagattaa acaaacagca acaccacaaa ccatataaaa 180
gtatgggttaa tgaaccagca tcagatttta aagaaacagc atcagataac gaaacggtca 240
ggtagaaaacc agacacaacg gacttaacag ggtaatccat gagttcaaca gggcacaaatg 300
gtcctcaaaa gtccattcat acttgggact tgactgggta tttaggtgat aacgatttgg 360
ggtcgggcac attcaccagt ttggccagct tttagccttg cttctagccc atggcaaaact 420
tc 422

<210> 408
<211> 429
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-045-Q1-K1-A7

<400> 408

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aatgctcact tgctccaagt tccattatta cacagttcct cccaccagtt acttcaatgg 180
gcttcgaaca ccagctgtg caagcctata ggctacaaca agcaattgcg gcgagcgtct 240
tacaacaacc aatttcccag ttgcaacaac aatccttggc acatctaaca atacaaacca 300

tcgcaacgca acagcaacaa caattcctac cagcactgag ccacctagcc atggtgaacc 360
 ctgccgccta cttgcaacag cagttgcttg catcaaacc acttgctctg gcaaacgtag 420
 ttgcaaacc 429

<210> 409
 <211> 412
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-045-Q1-K1-A9
 <400> 409

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 taatgctcgc aagctcctat aacttaactt attgccccgt acctatcacc atcggtgtct 180
 tcagtatgtg aaaactacaa ttcttcaacc gatacaggat ccaacaggca atcgagctg 240
 gcatcttacc tttatcacc tggttcctcc aacaatcatc agccctatta caacagttac 300
 ctttggtgca cttattgtca caaaacatga tggcacagca tctacaacaa cttgtgctag 360
 ctaaccttgc tgcctactct cagcaacagc agtttatttc attcatccaa ct 412

<210> 410
 <211> 438
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-045-Q1-K1-B1
 <400> 410

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 ccctcaatgc tcacaagctc ctatagcttc ccttcttccc ccataccttc catcaattat 180
 agcttcaata tgtgaaaacc cagctcttca accatatagg cttcaacaag caatcgagc 240
 aagcaacata cttttatcgc ccttggtgtt tcaacaatcg ccagccctat ctttggtgca 300
 gtcattggta caaacatca gggcacaaca gctgcagcaa ctcgtgctac ctctgatcaa 360
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ccaactgtct acactgaa

438

<210> 411
<211> 399
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-045-Q1-K1-B10

<400> 411

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gctcacaagc tectatagct tcccttcata acctcattcc tctcacctac cgtatcttat 180
atctatgaaa acccaattat tcatctctat aagacccatc tctcaatcac agcatctatc 240
taacctacat aaccctttct cctcctacaa tcatcctacc tatcacagca cttacattac 300
atgcacttat tgtcacatac cttcatgact aatcttctac aacaactctt gctacctcac 360
accgctgaac tactctcagc ctctgctgct tatttcatt 399

<210> 412
<211> 418
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-045-Q1-K1-B11

<400> 412

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ggccaagccg ctgaaggcgc ccaaggccga caagaaggag tacgacgaga cggatcttgc 180
atatctgcag aagaagaaag atgaggaaaa agcactgaag gagcttaagg ccaaggcaca 240
gaagggcgcg attgggggct cgggtctgaa gaaaagtgga aagaaatgag actggtcacc 300
cgtctccaat acctagagga tgataaggca gctgtctatc tgtgttgccg ttcactaagt 360
gtgattgtaa cagtgggtacc tcttgtgttc tgtgttccgc gatgttgagc ttgggttg 418

<210> 413
<211> 446
<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-044-Q1-K1-H8

<400> 413

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gcaatcgcag ctggcatctt acctttatca cccttggttc tccaacaatc atcagcccta  180
ttacagcagt tacctttggg gcattttatt gcacaaaaca tcagggcaca acaactacaa  240
caacttgtgc tagcaaacct tgctgcctac tctcagcaac aacagtttct tccattcaac  300
caactagctg cattgaactc tgcttcttat ttgcaacaac aacaactacc attcagccag  360
ctatctgctg cctacccccca gcaatttctt ccatttaacc aactgacagc tttggaactc  420
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<210> 414

<211> 255

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-049-Q1-K1-G10

<400> 414

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tgagatgatg cgggcaactt ttatgtgtta gaacattgta ctcaactgat gcttgtggcc  120
gttgaaccta ttatacttac ttttggattt aagttaagga tagttaaaaa tattttgatgt  180
tgaatacttg tgttggatgt tatatgtgtc aattctatgt ggatgctaga aaagttgtgt  240
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<210> 415

<211> 246

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-049-Q1-K1-G11

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tatgggtgcag gcacccccca tgtgtcatat cattgtactc aactgatgct tgtggccggt 120
gaacctatta tacttactta tggatttaag ttaatgatag ttaataatat ttgatgttta 180
atacttgtgt tggatgtcat atgtgtcaat actatgtcga tgctacaaaa gctgtgtaaa 240
caacat 246

<210> 416
<211> 417
<212> DNA
<213> Zea mays
<223> Clone ID: LIB3061-049-Q1-K1-G12
<400> 416

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actaccctac tcaaccgccc cggcctcagc ctcatcccca gccacacca tgcccgtgcc 360
aacagccgca tccaagcccg tgccagctgc aaggaacctg ccgcgttggc agcacc 417

<210> 417
<211> 176
<212> DNA
<213> Zea mays
<223> Clone ID: LIB3061-049-Q1-K1-G2
<400> 417

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tgtccagaaa ccaatggatc cccaaacgat ttctgctcgt ctcttttcta caactccaat 120
caatccacag ttcacttatg ttgcagcccc atgaccacgt tattttcaaaa atgtta 176

<210> 418
<211> 389
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB3061-049-Q1-K1-G3

<400> 418

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caatgctcgc aagctcctat agcttccctt cttcccccggt acctctcacc agcgggtgtct 180
tcggtatgtg aaaacccaat tcttcaaccc tacaggatcc aacaggcaat cgcagctggc 240
atcttacctt tatcacctt gttcctccaa caatcatcag ccctattaca acagttacct 300
ttggtgcatt tattggcaca naacatcang gcacaacaac tacaacacct tgtgctagca 360
aaccttgctg cctactctca gcaacagca 389

<210> 419
<211> 454
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-049-Q1-K1-G4

<400> 419

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atggcgaatg cgaagaggct tgccaaggaa gaaggcctgc tcgtgggcat ttctttcgga 180
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tttagagaaa tatgtgacat gctttctaca tatt 454

<210> 420
<211> 371
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-049-Q1-K1-G6

<400> 420

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<210> 421
 <211> 458
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-049-Q1-K1-G8

<400> 421

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 tgggagagta cttttgtgat atatgcaa atttatgatga tgatacagac aaagggcagt 420
 accattgcat cgattgtggc atatgcaggg ttgggtggc 458

<210> 422
 <211> 341
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-049-Q1-K1-G9

<400> 422

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ctcaatgctc acaagctcct atagcttccc ttcttccccc ataccttcca tcaattatag 180
 cttcaatatg tgaaaaccca gctcttcaac catataggct tcaacaagca atcgagcaa 240
 gcaacatacc tttatcgccc ttgttggttc aacaatcgcc agccctatct ttgggtgcagt 300
 cattggtaca aaccatcaag gcacaacagc tgcagcaact c 341

<210> 423
 <211> 473
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB3061-049-Q1-K1-H1
 <400> 423

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 caaggcgagc cggcagcagc actgcctcaa gtactgcggg atctgctgcg ccacctgcaa 240
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 tgtcttgcat gcgtatgtaa tgtataggct gtgcaatgca tgcatacatg atacatgccg 420
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<210> 424
 <211> 355
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-049-Q1-K1-H10
 <400> 424

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 gctcacaagc tctatagct tcccttctc ccccatacct tccatcaatt atagcttcag 180
 tatgtgaaaa cccatctctt caaccatata tgcttcaaca agcaatcgca gcaagcaaca 240

tacctttatc gcccttggtg tttcaacaat caccagccct atctttggtg cagtcattgg 300
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<210> 425
 <211> 356
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-049-Q1-K1-H11
 <400> 425

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 caatgctcgc aagctcctat agcttccctt ctcccccggt acctctcacc agcgggtgtct 180
 tcggtatgtg aaaacccaat ttttcaaccc tacaggatcc aacaggcaat cacagctggc 240
 atcttacctt tatcaccctt gttcctccaa caatcatcag ccctattaca tcagttacct 300
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<210> 426
 <211> 368
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-049-Q1-K1-H12
 <400> 426

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 ggagcccatg tggctcacgc tctcctgatg cgaagcctga ataaaattgc tatgctgtta 120
 aaggattgca gatggagtca ggagctcttc ttttcttaac atttgtcctc tgttctagta 180
 ccatcagtgt cttatcgcag tacgagattg gatgatatta actatctgta tcagcttgta 240
 tcgatggact ccaagtgttg tcactcttgt tgtctagtgt gctgaaggac ccatttactt 300
 ttgctaaact tttccattgg tgattgttgg atgaaaaact acaacaactt gtgctaacia 360
 accttgct 368

<210> 427
 <211> 425
 <212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB3061-049-Q1-K1-H3

<400> 427

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cctcaatact cacaagctcc tatagctgcc cttcttccgc cataccttcc atcaatgacc 180

gctttaatat gtgaaaaccc agcccttcaa ccctacagga tccagcaagc aatcgcaaca 240

agcaacttac ctttatcaca cctgttcttt caacagtcgc cagccctatc tttggtgcag 300

gcattggtac aaaccatcag ggcagaacag ttgcagcaac tcgtgctacc agtgatcagt 360

caagtagctc tggcaaacct ttcccctac tctcagcaac aacaatntct tgcattcaac 420

caact 425

<210> 428

<211> 222

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-049-Q1-K1-H4

<400> 428

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tgaaagctct ggtacggagt agcaaggtag ggtagagaga gagagagtag caaactagct 120

aaggcacagg gcagggcatg ggccggctgc attatattgg gatcggatct gggggcgacc 180

gagctagcat cagctgagag aagaaagagg ggcaatatat aa 222

<210> 429

<211> 309

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-049-Q1-K1-H5

<400> 429

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ggagcccatc ttgttcacgc tcttctgatg ccaagcctga ataaaattgc tattctgtta 120

aacgattgca tatggagtca agagctcttc ttttcttaac atttgtactc tgctctacta 180
ccatcatagt ctcatcgag tacgagattg catgatatta actatctgca tcagcttgta 240
tcgatggact ccaaagtgtg catctctcgt tgactagagc actgaacgac ccatttactt 300
tagctaaac 309

<210> 430
<211> 375
<212> DNA
<213> Zea mays
<223> Clone ID: LIB3061-049-Q1-K1-G1
<400> 430

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gttttccaag aaatgttga aaagagtaca tctgttcaag caagttgggtg tccggaaacc 120
aatggatccc caaaaggatt tgctgctacg tctcttggtc gacaaactcc agtcgatgcc 180
acaagttcac tgatgtggca tgcccatga gccagttat tcgaaaaagg ttacgctgga 240
gatgctttgc tgcaagtttg aacttagaag atggccctgc accctctgac tcgacgtcat 300
cttcatcaga gcagactact gatgctgatg gaactactaa tgggtgatgta tctgaaaatc 360
tgctttctcg aaagc 375

<210> 431
<211> 345
<212> DNA
<213> Zea mays
<223> Clone ID: LIB3061-049-Q1-K1-E7
<400> 431

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tacgaagata ttagccctcc ttgcgcttct tgccctttta gtgagcgcaa caaatgcgtt 120
cattattcca cagtgtcac ttgctcctag tgccattatt ccacagttcc tcccaccagt 180
tacttcaatg ggcttcgaac atccagccgt gcaagcctac aggtacaac tagcgcttgc 240
ggcgagcgcc ttacaacaac caattgccc attgcaacaa caatccttgg cacatctaac 300
cctacaaacc attgcaacgc aacaaccaca acaacaaccg tttct 345

<210> 432
 <211> 447
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-049-Q1-K1-E8

<400> 432

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 ttgtttgccct tttagtggagc gcaacaaatg cggttcattat tccacagtgc tcaacttgctc 120
 ctagtgccag tattccacag ttctctccac cagttacttc aatgggcttc gaacatccag 180
 ccgtgcaagc ctacaggcta caactagcgc ttgcggcgag cgccttataa caaccaattg 240
 cccaattgca acaacaatcc ttggcacatc taaccctaca aaccattgca acgcaacaac 300
 aacaacaaca agttctggca tcaactgaacc aacctaccgc tgtgaaaccc tgtcacctac 360
 ttgcaacagc agctgcttgc atccaaccca cttgctctgg cgaacgtagc tgcttaccag 420
 caacaacaac agcttgacac gtttatg 447

<210> 433
 <211> 316
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-049-Q1-K1-E9

<400> 433

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 tgtgaaaacc caattcttca accctacagg atccaacagg caatcacagc ttgcatctta 180
 cctttatcac ccttgttcct ccaacaatca tcagccctat tacatcagtt acctttgggtg 240
 catttattgg cacaaaacat cagggcacaa caactaccac aacttggggt aacaaacctt 300
 ggtggctaatt tttaac 316

<210> 434
 <211> 407
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-049-Q1-K1-F1

<400> 434

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gctccttat gctccttggc ctttctgcaa gtgctgtac ggcgaccatt ttcccacaat 120
gctcacaagc tcctatagct tcccttcttc ccccgtagct ctcaccagcg gtgtcttcgg 180
tatgtgaaaa cccaattctt caaccctata ggatccaaca ggcaatcgca gctggcatct 240
tacctttatc acccttggtc ctccaacaat catcagccct attacagcag ttacctttgg 300
tgcatttatt ggcacaaaac atcagggcac aacaactaca acaacttggt ctagcaaacc 360
ttgctgccta ctttcagcaa caacagtttc ttccattcaa ccaacta 407

<210> 435

<211> 438

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-049-Q1-K1-F10

<400> 435

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cgatggcgac gtcgaacacg gcgcgggatgg aggacggcgg cggcgacctg cggagcacca 120
tgaagaagtg gaatatcatc taccctgtct acctcaactc caagaagacg gtcgccgagg 180
gccgccggat cgacgatgcc aaggcctgcc cggaccccac ctgcatcgag atcgctgact 240
gctgttcgca cctcatgac cccacgcca tcgagttgga taacgcgtac cctcgggatt 300
tcttcaggt ggggagggtc aggggtgcagc ttaagaaaaga tgacggcttc gccgtcaatc 360
ctgctattaa aacgaagaag cagctgatga tccaagtagc agagctagtt cccaagcatc 420
acggaacgac aaagaagc 438

<210> 436

<211> 428

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-049-Q1-K1-F11

<400> 436

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gctacggggg ctttctgcaa gtgctgctac ggcgaccatt ttcccgcaat gctcgcaagc 120
tcctatagct tgccttcttc caccgtacct atcaccagcg gagtcttacg tatgtgaaaa 180
cccaattctt caaccctaca ggatccaaca agcaatcgca gctggcatat tacctttatc 240
acccttggtta cttcaacaat catcaggcct attacaacag ttacctttgg tgcatttatt 300
ggcacaaaac atcaaggctc aacaactacc acaacttggtg ctaacaaacc ttggtggcta 360
ctgttagcaa cagcagggtc cttcattcga ccacttggtc tcattgaact ccgcttctta 420
attgcaac 428

<210> 437
<211> 361
<212> DNA
<213> Zea mays
<223> Clone ID: LIB3061-049-Q1-K1-F12
<400> 437

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gctagggggg ctttctacaa gtgctgctac ggcgaccatt ttcccgcaat gctcacaagc 120
tcctatagct tcccttcttc ccccgacct atcaccagcg gcgtcttacg tatgtgaaaa 180
cccaattctt caaccctaca tgatccaaca ggcaatcgca gctggcatat tacctttatc 240
acccttggtc cttcaacaat catcaggcct attacaacag ttacctttgg tgcatttatt 300
ggcacaaaac atcaaggcac aacaactaca acaacttggtg ctagcagacc ttgctgccta 360
c 361

<210> 438
<211> 459
<212> DNA
<213> Zea mays
<223> Clone ID: LIB3061-049-Q1-K1-F2
<400> 438

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gctgcttggg ctttctgcaa gtgctgctac ggggaccatt ttcccgcaat gctcgcaagc 120

tcctataagt tcccatcttt ccccgtaact ctcaccagct gtgtcttcgg ttgggaaaac 180
 ccagttcttc aaccctacag gatccaacag gcaatcacag ctggcatctt acctttatca 240
 cccttgatcc tccaacaatc atcagcccta atacatcagt tacctttggt gcattttattg 300
 gcacaaaaca tcagggcaca acaactacaa caacttgtgc tagcaaacct tgggtgcctac 360
 tcttagcaac agcagtttct tccattcaac caactagctg cattgaactc tgctttctat 420
 ttgcaacaac aacaactacc attcagccag ctacctgct 459

<210> 439
 <211> 327
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB3061-049-Q1-K1-F4

<400> 439

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 tgattgttcc acatattcgc agttgaccgg gtccctcggag cacgatgaag tttgttgctg 180
 cctacttgct tgctgtcctc gctgggaacg ccagcccctc cgctgaagat ttgactgcca 240
 ttctggagtc agttggctgt gaagttgaca atgaaaggat ggaactcctg ctgtcccaac 300
 tgagncgcaa tgacatcacc gagctca 327

<210> 440
 <211> 445
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-049-Q1-K1-F5

<400> 440

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 cggctgcggc tgccagccac cgccgcgggt tcatctaccg ccgcgggtgc atctgccacc 180
 tccggttcac ctgccacctc cgggtgcatct cccaccgccg gtccacctgc cgccgcgggt 240

ccacctgcca cgcgcggtcc atgtgccgc gccggttcac ctgccgcgc caccatgcca 300
ctaccctact caaccgcccc ggctcagcc tcacccccag ccacacccat gcccggtgcca 360
acagccgcat ccaagcccgt gccagctgca gggaacctgc gccgttggca gcaccccgat 420
ccctggccag tgcctcgagt ttctg 445

<210> 441
<211> 352
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-049-Q1-K1-F6

<400> 441

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ctttgacaaa ccagcagcc ttctaccaac aacacatcat tggcggtgcc ctcttttaga 120
ttgcttatta gttgtaattc aataatgaag ttttttggct gatgtatgtg gcctcctaga 180
aataagaagt tatatttcca aaaaacaaat acaaacgaca gtacaactga caacgacaga 240
acaaactgac aacgacagtc catgtgccga cgacgggttca tctgccggcg acaccatgcc 300
actaccctac ttaaccgacc cggcctaaaa aaaaaagggg ggcccttttt aa 352

<210> 442
<211> 413
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-049-Q1-K1-F7

<400> 442

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aagttctcgg cagtaagagg cagcagcaat aattcctcca caaacttcta acttcagaaa 120
tataaagtaa cacttaggcc agcattcggc cgttctccaa atcaaaaact tattcttctt 180
cctcagcctc ctcgagccat ttgacaaacg gctccagagc tttcacgaaa gattgcctgc 240
ccttctgggt tgaaccttta cggaacccaa gcaggacagt atcttcagct aggacatctt 300
ggtcatacag tggtcttatg atttcaggaa acagcttcat cagcttagca tctcatagc 360
actgtgtctg tactttgtat ataagttcca gttcgagtct gccactcgtg caa 413

<210> 443
<211> 422
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-049-Q1-K1-F8

<400> 443

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cagcaaaccg tgctttcttc ttgacacagc aacagttgct gcctttctac cagcagtttg 120
cggctaaccc cgcaaccctc ttacaactac aacaattggt gccctttgtc caacttgctt 180
tgacagaccc agcggcctcc taccaacaac acatcattgg tggcgccctc ttttagattg 240
cttattagtt gtaattcaat aataaagtat tttggatgat gtatgtggcc aaccagatat 300
aagatgttac atttccaaaa gatattatga ttccaggaaa cagcttcacg agcttaacat 360
tctcatagca ctgtgtctgt actttgtata taagttccat ttcgagtcta gcaactcgctg 420
aa 422

<210> 444
<211> 420
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-049-Q1-K1-F9

<400> 444

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aggcggcgcc gttggcggag gcgcgcgtgt gccggcgccg gagcgcgggc ttcaaggggg 180
tctgcatgtt cgaccacaac tgccgcgaag tgtgcttgca agagggctac ggcggcgcca 240
actgcgacgg catcatgcgc cagttcaagt gcatcaagga gtgctaacta gctaggctct 300
aagatctaac cagctagcta tatccgcctt taattaaatt aataaggatc gacgtcgtgg 360
ccggtcgcta aatatgtact actatacgtc tacactacat gcaataatgc accacatgta 420

<210> 445
<211> 408
<212> DNA

<213> Zea mays
 <223> Clone ID: LIB3061-049-Q1-K1-E6
 <400> 445

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cctcaatgct cacaagctcc tatagcttcc cttcttcccc cataccttcc atcaatgata 180
gcttcagtat gtgaaaaccc agctcttcaa ccctataggc tccaacaagc aatcgagca 240
agcaacatac ctttatcacc cttgggttcaa caatcgccag ccctatcttt ggtgcagtca 300
ttggtacaaa ccatcaaggc acagcagctg cagcaactcg tgctacctgt gatcaaccaa 360
gtagctctgg caaacctttc tcctactat cagcaacaac aatttctt 408

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<210> 446
 <211> 439
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-049-Q1-K1-D10
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cctagtgcc a ttattccaca gttcctacca ccagttactt caatgggctt cgaacaccta 180
gctgtgcaag ccaacatgca acaacaagcg cttgcggcga gcgtcttaca acaaccaatt 240
gcccaattgc aacaacaatc cttgccacat ctaacaatac aagccatcac aacgcaacag 300
caacaacagt tcctaccagc actgagccac ctagccatgg tgaaccctgc cggctacttg 360
caagagcagc tgcttgcac caaccactt gctctggcga acgtagttgc aaaccagcaa 420
catcaacagc tacaacagt 439

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<210> 447
 <211> 319
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-049-Q1-K1-D11

<400> 447

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gtacgaggcg atcttcggat tggtcctcca gtccatcctg cagcagcagc cgcaaagcgg 120
ccaggtcgcg gggctgttgg cggcgcagat agcgcagcaa ctgacggcga tgtgcggcct 180
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tgcgctgtag tatagccgct ggctagctag ctagctgagt catttatcgg cgatgatcgg 300
gtaataatgt gtcacgcat 319

<210> 448

<211> 389

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-049-Q1-K1-D12

<400> 448

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cctacttatg ctcccttggtc gttctgcaag tgctgctacg gcgaccattt tcccgcgaatg 120
ctcgcaagct cctatagctt cccttcttcc cccgtacctc tcaccagcgg cgtcttcggt 180
atgtgaaaac ccaattcttc aaccctacag gatccaacag gcaatcgag ctggcatctt 240
acctttatca cccttggttc tccaacaatc atcagcccta ttacaacagt tacctttggt 300
gcattttattg gcacaaaaca tcagggcaca acaactacaa caacttgtgc tagcaaacct 360
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<210> 449

<211> 312

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-049-Q1-K1-D2

<400> 449

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gacatttgat caccactata tctcccgcta ccatgcagac gactacgtga ttgctaccca 180

cagagggaga cttgcattca gccgactaac ttccactgca ctatcatgta tattgactac 240
cgcatcgcta gctaaatgcc tgcagtgtat aagggtgtgat cgtactacga cgcttgacta 300
tccacaggat tt 312

<210> 450
<211> 458
<212> DNA
<213> Zea mays
<223> Clone ID: LIB3061-049-Q1-K1-D4
<400> 450

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tcattattcc acagtgtca cttgctccta gtgccattat tccacagttc ctcccaccag 180
ttacttcaat gggcttcgaa catccagccg tgcaagccta caggctacaa ctagcgcttg 240
cggcgagcgc cttacaacaa ccaattgccc aattgcaaca acaatccttg gcacatctaa 300
ccctacaaac cattgcaacg caacaacaac aacaacaaca gtttctgcca tcaactgagcc 360
acctagccgt ggtgaaccct gtcacctact tgcaacagca gctgcttgca ttcaaccac 420
ttgctttggc gaacgtagct gcataccagc aacaacaa 458

<210> 451
<211> 395
<212> DNA
<213> Zea mays
<223> Clone ID: LIB3061-049-Q1-K1-D5
<400> 451

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ccgcaatgct cacaagctcc tatagcttcc cttcttctc cgtacctctc accagcggtg 180
tcttcggtat gtgaaaaccc aattcttcaa ccctacagga tccaacaggc aatcgagct 240
ggcatcttac ctttatcacc cttgttctca caacaatcat cagccctatt acaggaatta 300
cctttgggtgc ctttattggc aaaaaacatt agggcacaac cacttccaca acttgtgcta 360

gcaaaaacttg gtggctaatt ttaacaacca cagtt

395

<210> 452

<211> 453

<212> DNA

<213> Zea mays

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<400> 452

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tcattctaccg ccgcccgtgc atctgccacc tccggttcac ctgccacctc cggtgcatct 180
cccaccgccc gtccacctgc cgccgccggt ccacctgccca ccgcccgtcc atgtgccgcc 240
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tcattccccag ccacacccat gcccgtgcca acagccgcac ccaagcccgt gccagctgca 360
gggaacctgc ggcgttgga gcaccccgat cctgggccag tgcgtcgagt ttctgaggca 420
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<210> 453

<211> 347

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-049-Q1-K1-D9

<400> 453

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tggcatactt atcctttatc atcccttggt cctccaacat atcatcgagc cctattacaa 180
tcagttactc ttttggtgca ttttaattggc acataaacat catgggcaca tacaactaca 240
tacaacttgt gctagcaaac gcttgctgcc tactctcacc aacagcagtt tcttccattc 300
aatcaactag gttcattgaa ctctgcttct tatttgcaac aacaaca 347

<210> 454

<211> 435

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-049-Q1-K1-E10

<400> 454

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agctcgtgca gcagcagcgc aggagtaact ggtggaatga tgatggtaac aggaaaagaa 180
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aaattattca atatcgctcct cctgttcctg aaactttcaa tcagccaata ccagcaaattg 300
aagctttcta ttcaaccctt gcacaaccag cttcaagccc tgcacttgag atgcccattg 360
atgtagagat gacttcaaac aatgttaata cctttgattc aactggcaat gattttactg 420
acacctctgc tctat 435

<210> 455

<211> 387

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-049-Q1-K1-E11

<400> 455

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cttccttatg ctcccttggtc tttctgcaag tgctgctacc gcaaccattt tcccacaatg 120
ctcacaagct cctatagctt cctttcttcc cccatacctc tcaccagcgg tgtcttcagt 180
atgtgaaaac ccaattcttc aaccctacag gatccaacag gcaatcgcag caggcatctt 240
accttaataa ccttggttcc tcaccaccc gtaagcccta ttacagcagt taccttgggg 300
ccattggttg ccccaaacca tcaaggccca ccacctccac cacctggtgc taggaaacct 360
tgctgectac tctaaccacc agcagtt 387

<210> 456

<211> 435

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-049-Q1-K1-E12

<400> 456

caacaatggc ggccaagata ttttccatcc ttatgctcct tgctctttct gcatgtgttg 60
ctaacgcgag catttttcct caatactcac aagctcctat agctgccctt cttcccccat 120
accttccatc aatgaccgct tcagtttggtg aaaaccacgc cttcaaccc tacaggctcc 180
aacaagcaat cgcaacaagc aacttacctt tatcaccctt gttctttcaa caatcgccag 240
ccctatcttt ggtgcagtca ttggtacaaa ccatcagggc acaacagctg caacaactcg 300
tgctaccagt gatcagccaa gtagctctgg caaacctttc tccctactct cagcaacaac 360
aatttcttcc attcaaccaa ctgtctacac tgaaccctgc tgcttattta caacatcaac 420
aactactacc attca 435

<210> 457

<211> 463

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-049-Q1-K1-E4

<400> 457

gccagctcat cgccaccgcc ctctccgct cccgcgtctt cttccccctcg tcgtcgctgg 60
gttggtgggt ccacctctcg ccgtgccccg ccgtcgaccc gcctcagaat caaagataag 120
tcaaaggaaa ggtcggtatg cgccggtggt ttgctgcac gaggtttaat gcttcatacc 180
gtgaacatga aaatgaacgt cccatcactc cagaggagaa agaaggaaat gggtttttct 240
gttaaaagtg atcccatcaa ggcaccacct tccattgaaa gtccctggaat atcaatttga 300
gaaattgaag gaaagaaccg ccattttggg tcaatggcct tgaatgggtga aggggcatat 360
tggaagagat ataatgcaat cttggacacc ggaaccacgg tggttgttaa aaagcttgac 420
gctttaacag accctgaact tgataatgag tttttgacac agg 463

<210> 458

<211> 359

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-049-Q1-K1-D1

<400> 458

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 cttgctgcct actctcagca acagcagttt cttccattca accaactagg ttcattgaac 120
 tctgcttctt atttgcaaca acaacaacta ccattcagcc agctacctgc tgcctacccc 180
 cagcaatttc ttccattcaa ccaactagca gcattgaact ctcttgctta ttacagcag 240
 caacaactac taccattcag ccagctagct ggtgtgagcc ctgctacctt cttgacacaa 300
 ccacagttgt tgccgttcta ccagcacctt gcgcctaacg cttgcacctt ttacaact 359

<210> 459
 <211> 406
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-047-Q1-K1-E3

<400> 459
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 agggccgggg tgttccagtg gatcatgcag aacgaagggt ggaccggcct gtttcgcggc 120
 aacgccgtca acgtactgcg cgtcgttccg agcaaggcta tcgagcattt cacctatgac 180
 acgggcaaca agttcctaac cccaagggc gacgagccgt ccaagatccc gatccccact 240
 acgatggttg ccggagctct agccggattc gcctgaacct tgtgcaccta ccccatggag 300
 ctgatcaaga ccagggtcac catcgagaag gacgtatacg acaacgtctc gcacgcgttc 360
 gagaagatcc tacgcgacga gggcccgtcg gagctgtacc gtgggc 406

<210> 460
 <211> 452
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-047-Q1-K1-E4

<400> 460
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 ttttgctcc ttatgctcct tggcttttct gcaagtgtctg ctacggcgac cattttccca 120
 caatgctcac aagctcctat agcttccctt cttccccgt acctctcacc aacggtgtct 180
 tcggtatgtg aaaaccaat tcttcaacct tacaggatcc aacaggcaat cgcagctggc 240

atcttacctt tatcaccctt gttcctccaa caatcatcag ccctattaca gcagttacct 300
 ttgggtgcatt tattggcaca aaacatcagg gcacaacaac tacaacaact tgtgctagca 360
 aaccttgctg cctactctca gcaacagcag tttcttccat tcaaccaact agctgcattg 420
 aactctgctt cttatttgca acaacaacaa ct 452

<210> 461
 <211> 254
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-047-Q1-K1-E5

<400> 461

atagtgcagca ttcagaaaca cacaaagcta aacgccctag aaacgaccta acgtcaatgg 60
 gtaccactat atttgctcta cttgagctaa ttacccttta ttagagcgaa tcatatacgt 120
 tcattattcc acaatgctca cttgaccta atgccattat tccacaaatg catgaaccag 180
 ctacttcaat ggactatgaa cacctaacta tgcaagcaca tcatgagaca acaagcgctt 240
 gctgcaagca actt 254

<210> 462
 <211> 399
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-047-Q1-K1-E6

<400> 462

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 gcataacgaa acacatcgct gtcggatcgg agatgatgag ttccgctcgtc gtggatgctg 120
 ctgctaccag cagcagcgag aagaagacgt cgtggccgga ggtgggtgggc atgtccatca 180
 aggaggcgac ggagactatt ctcaaggaca tgcccaacgc gtacatccag gtgctgcctg 240
 ttgggtcgcc cgtgacgctg gaccttcgcc ccgaccgcgt ccgtatcttc gttgacaccg 300
 tcgccatgac tccgacagtt ggggtgataca taccaaatgc aatagacaaa ccctacttta 360
 tattttatgc ttccagctaa taataaacca ggccttagc 399

<210> 463

<211> 77
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3061-047-Q1-K1-E7

 <400> 463

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 ctcagattca tgcctca 77

<210> 464
 <211> 193
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3061-047-Q1-K1-E8

 <400> 464

 gcaacatttg ttgccgttct acctgcacac tgcgcctaac gttggcaccc tcgtacaact 60
 gcaacaattg ctgccattcg accaacttgc ttgacaaac ccagcagtgt tctaccaaca 120
 acccatcatt ggtggtgccc tcttttagat tgcttatgag ttatagttca ataataaagt 180
 tttttttgct gat 193

<210> 465
 <211> 402
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3061-047-Q1-K1-E9

 <400> 465

 gcaacatata aagcacaata gtgtaccaac aatggcagcc aaaatatttt gcctacttat 60
 gtccttgggt ctatctgcaa gtgctgtac ggcgaccatt ttaccgcaac gtcgcaagc 120
 tcctatagct tcccttcttt ccccgtaact ctcaccagcg gcgtcttcgg tatgtgaaaa 180
 cccaattctt caaccctaca ggatccaaca ggcaataaca gatggcatct tacatctatc 240
 acccttgatc cttcaacaat catcatccct attacatcag ttacctttgg tgcatttatt 300
 ggacacaaac atcagggcac aaccactaca acaactcgtg ctagcaaacc ttgctgccta 360
 ctctcagcat cagcagtttc ttccattcaa ccaactagct gc 402

<210> 466
<211> 391
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-047-Q1-K1-F1

<400> 466

cccaactata caatcctaca tgctacatga ggccatcgta gcaagcatct tacggtcatg 60
agcattaacc ctccaacagc catatgccct attgcaacaa ccataccttag tgcattctgta 120
tctccaaaga atcgcgacac aacaactaca acaacagttg ctaccaacaa tcaatcaagt 180
agttgcagcg aaccttgctg cttatctcca gcaacaacaa tttcttccat tcaatcaact 240
agctgggggtg aaccctgctg tctacttgca ggcacaacaa ctactaccat ttaaccaact 300
tgtcggggagc cctgatgcct tcttactgca acaacagctt ctgccattcc atctgcaagc 360
tgtggaaaac attgcttctt tcttgcgaca a 391

<210> 467
<211> 398
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-047-Q1-K1-F10

<400> 467

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aagcgaacag gccgcccgtg gacgccatgg cgccggatct ggtgaacggc gtgctcaact 120
gggtggggac gccggccatg gtggccagcc tgctgctctt ctaccggtcc tactatctct 180
tcaagacatg ctactccttc ctttgtgtgc tcttgcccga ggacctcgcc ggcaagggtcg 240
acctcatcac tggcgcttcc tccggcatcg gcgagcaact ggcctaccag tacgcgctga 300
atcggggcgtt ccttgtcctc gtcgcgagaa gggagtcgag cctacggcac gtggccgacc 360
gagcactcga gctcgggtgc gcgcacgtcg tcgtcctc 398

<210> 468
<211> 389
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-047-Q1-K1-F11

<400> 468

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acggagtttg gccagaatgt cagggtactg gaattcacgt caacggtgat gaactcgaga 120
agcctagcat ttctttatca cagatgtttc gcttgaagat gaaagcaatt gaagctcaca 180
aagcgtggct gaagagacct gaagcgcttg agaactcgac cactgagctt catttcccct 240
cagaacatgt ggagaactct gaggagaacg cgttgccact catatcactc cgatgctatg 300
ccgctgatgg gtacacagat cgttgatggc agctactgga ggatgctgca gtcgtagacg 360
ttaatgagct ctcttgacag ctgtggaac 389

<210> 469

<211> 426

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-047-Q1-K1-F12

<400> 469

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gcacgagcac gtatccgtac accgcgcttc cgctgtctgc tggcgacccg tacccttcca 120
ctgtcactgc tgccggacat ggcgctgca gcgtcgaaat tacacaacgg ctacatgatg 180
gcactccgat gcacgtctac cagcaacgtg ctcatgccta cgaggttcag cacgcagaac 240
ctgcgaccgt tgaagcgcgt gatccttcca gcctgaaaga tcgatacttg ggactggtaa 300
caacacatga cactgagcct cacctccatg gcgcatacct accagcctgt gagacatcta 360
gctatcacga acggtactgt attcgtgact atgggaacga ttgcgtcgaa cccaattgct 420
acggat 426

<210> 470

<211> 416

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-047-Q1-K1-F2

<400> 470

gctgctcacc gtcccgtctt gggcgcccg agcggtactg gcgctgctga cgggggcccgc 60
 ctgctcgtc gctgctgcg ccggcctggc cgcggtcgcc gcgggcacgt gggcgccacg 120
 gtacttcacg gggcgctact ccgtcggcgc gcaccgggtg cagtccgccg atcagtaacg 180
 ccgcgggggc acggtcgcgg acgtggccag ccgagtgagg ggggtactacg acgcctacgc 240
 gcgagagtac ggcggttacc cgacgcgccc gcaactctcg gtcaaggacg ccgcgcccgg 300
 ggcgtaacgt agcttggtg tgctgagcgg tctctccctc tgtctctccc tctctttgct 360
 ccctcgtgct cacgtgctgt acatatgttt cgtcgatcta gcagtcgtgt ttcgct 416

<210> 471
 <211> 445
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-047-Q1-K1-F4

<400> 471

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 ggcttcaacg tgcccatgag cttcctcccg gacggcgggt ccgggtgcag ccgcggcccc 120
 cgctgcgccg tggacgtgaa cgcgcgctgc cctgccgagc tcgggcagga cggcgtgtgc 180
 aacaacgcgt gccccgtgtt caagaaggac gagtactgct gcgtcggctc ggcgggccaac 240
 gactgccacc cgaccaacta ctccaggtag ttcaaggggc agtgccccga cgcgtacagc 300
 taccccaagg atgacgccac cagcaccttc acctgccccg ccggaaccaa ctacaaggctc 360
 gtcttctgcc cgtgaggccg ctgaactagc atcagcgtgc gcgcgtcgac caagaacaag 420
 aaataaacga ccgaggctgt gtatg 445

<210> 472
 <211> 447
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-047-Q1-K1-F5

<400> 472

attgagacca actagcaaca tataaagcac aatagtgtac caacaatggc agccaaaata 60
 ttttgcttcc ttatgctcct tggctcttct gcaagtgttg ctaccgcaac cattttccca 120

caatgctcac aagctcctat agcttccctt ctccccccat acctctcacc agcgggtgtct 180
tcaatgtgtg aaaccccaat tgttcaaccc tacaggatcc aacaggcaat cgcaacaggc 240
atcttaccat tatcacctt gttcctccaa caaccgtcag ccctattaca gcagttacct 300
ttgggtccatt tgggtggcaca aaacatcagg gcacaacaac tacaacaact tgggctagca 360
aaccttgctg catactctca gcaacatcaa gttcttccat tcaaccaact ggctggcatg 420
gactcttggtg cttaattgca accacca 447

<210> 473
<211> 438
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-047-Q1-K1-F6

<400> 473
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gggtgacagc caatactcct tctctcttac cactttcagc ccgtcgggaa agcttggtgca 120
gatagagcac gcgctcacgg ctgtcggatc cgggcagacc tccctaggga tcaaagctgc 180
caacgggtgta gtgattgcca ccgagaagaa actgccttct attttagtgg atgaaacatc 240
tgtgcaaaag attcaggcac taacaccaaa tattggagtt gtctatagtg ggatgggtcc 300
agattttcgt gttctgggtga gaaaaagtgc aaagcaggca cagcagtatt atcggttgta 360
caaggagcat atacctgtaa cacagcttgt gcgggagact gctgctgtga tgcaggagtt 420
cacacagtca ggtgggtgc 438

<210> 474
<211> 452
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB3061-047-Q1-K1-E2

<400> 474
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cttccaagac attatccctc cttagcgttc ttgccctttt tgtgagtgca acaaatgcgt 120
tcattattcc acaatgctca cttagctccga gtgccattat tccacagttc ctccctccag 180

ttacttcaat gggcttcgaa caccagctg tgcaagccta taggctacaa caagcgcttg 240
 cggcgagcgt cttagaacaa ccaattgccc aattacaaca acaatccttg gcacatctaa 300
 ccatacaaac catcgcaacg cagcagcaac aagcactgag ccacctagcc gtgggtgaacc 360
 ctatcgcccta cttgcaacaa cagctgcttg cattcaaccc acttgcnttg gcaaacgtag 420
 ctgcatacca acaacaacaa cagttgcaac ag 452

<210> 475
 <211> 445
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-047-Q1-K1-D10

<400> 475

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 gcctccttat gctccgtggg tttctgcaa gtgctgtac ggcgaccatt tttccgcaat 120
 gctcgcaagc tcctatagct tcccttctta ccccgtaact ctcaccagcg gtgtcttcgg 180
 tatgtgaaaa cccaattctt caaccctaca ggatccaaca ggcaatcaca gctggcatct 240
 tacctttatc acccttggtc ctccaacaat catcagccct attacatcag ttacctttgg 300
 tgcatttatt ggcaaaaac atcagggcac aacaactaca acaacttggt ctagcaaacc 360
 ttgctgccta ctctcagcaa cagcagtttc ttccattcaa ccaactagct gcattgaact 420
 ctgcttctta tttgcaacaa caaca 445

<210> 476
 <211> 384
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-047-Q1-K1-D11

<400> 476

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 ctgcgcgcta acgctggcac cctcttacia ctgcaacaat tgctgccatt caaccaactt 120
 gcttcgacaa acccagcagc gttctaccaa caaccatca ttggtgggtgc cctcttttag 180
 atctcttatg agccatagtt caatcataca gttttttgac tgatgtttgt ggcttcccag 240

aaataagaaa gtccatgctt aaaaaaaaaa gataccacta ttaccattca tccagacaaa 300
 tactgactac tctaaggctc aacaaatctc gtgcattcaa ccaattgggc gctactatca 360
 caagctgctt atttgcagca ttca 384

<210> 477
 <211> 425
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-047-Q1-K1-D12
 <400> 477

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 tttgggtgag tcattggtac aaaccatcag ggcacaacag ctgcagcaac tcgtgctacc 120
 tgtgatcaac caagtagctc tggcaaacct ttctccctac tctcagcaac aacaatttct 180
 tccattcaac caactgtcta tactgaaccc tgctgcttat ttgcagcaac aactattacc 240
 atttagccag ctactactg cctactctca gcaacaacaa cttcttccat ttaaccaatt 300
 ggccgcactg aaccccgctg cttatttgca gcagcaaata ctactgccat ttagcgagct 360
 agctgcagca agtcgtgctt ccttcttgac acagcaacag ttgctgcctt tctacaagca 420
 gtttg 425

<210> 478
 <211> 457
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-047-Q1-K1-D2
 <400> 478

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 tccctgctta tgctccttgc tctttctaca tgtgttgcta acgcgacaat tttccctcaa 120
 tgctcacaag ctctatagc ttcccttctt ccccatacc ttccatcaat tatagcttca 180
 atatgtgaaa acccagctct tcaaccatat aggcttcaac aagcaatgc agcaagcaac 240
 atacctttat cgcccttggt gtttcaacaa tcgccagccc tatctttggt gcagtcattg 300
 gtacaaacca tcagggcaca acagctgcag caactcgtgc tacctctgat caaccaagta 360

gctctggcaa acctttctcc ctactctcag caacaacaat ttcttccatt caaccaactg 420
tctacactga accctgctgc ttaattgcag caacaac 457

<210> 479
<211> 391
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-047-Q1-K1-D3

<400> 479

aagaaatcca tcgagaggcc gtcgacaggg gaattaatgg cgtcgtcgtc tagcagcagg 60
caccggcgcc tcactctcgc agccgcccgc ctgctctccg tgctcgcggc tgccagcggc 120
agcgccggga cctcctgcgt gccgggggtgg gccatcccgc acaaccgcgt cccgagctgc 180
cgctggtacg tgaccagccg gacctgcggc atcgggccgc gcctaccgtg gccggagctg 240
aagaggagat gctgccggga gctggcggac atcccggcgt actgccggtg cacggcgctg 300
agcactctca tggacggcgc gatcccgccg ggcccggacg cgcagctgga gggccgccta 360
gaggacctgc cgggctgcc gccgggaggtg c 391

<210> 480
<211> 417
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-047-Q1-K1-D4

<400> 480

gtcagaagct cagatactga tctcactgat ccagtatggc tatggcaaag gcaggcgcgc 60
cgaggggtctc ggcgggccag ctgggtgactc tcgggctatc actcctctgc gctgtcgccc 120
gcccgggcga cgcgcagaac tgcggtgccc agccaaacgt atgctgcagc aagtatggct 180
actgcgggcac gaccgacgag tactgcggcg acgggtgcca gtcggggccc tgccgctcgg 240
gcggcgggcg cagcagtggc ggcggtggtg cgaacgtggc tagcgtcgtc accggctcct 300
tcttcaacgg catcaagagc caggccggga gcggctgcga gggcaagaac ttctacaccc 360
ggagcgcggt cctgagcgcc gtcaaggcgt acccaggctt cggccatggc gggtcgc 417

<210> 481
 <211> 452
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-047-Q1-K1-D5

<400> 481

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 agcattaacc ctccaacagc catatgccct attgcaacaa ccataccttag tgcattctgta 120
 tctccaaaga atcgcgacac aacaactaca acaacagttg ctaccaacaa tcaatcaagt 180
 agttgcagcg aaccttgctg cttatctcca gcaacaacaa tttcttccat tcaatcaact 240
 agctgggggtg aacctgctg tctacttgca ggcacaacaa ctactaccat ttaaccaact 300
 tgtcggggagc cctgatgcct tcttactgca acaacagctt ctgccattcc atctgcaagc 360
 tgtggaaaac attgcttctt tcttgcgaca acaacaattg gtgccatttt acccacaggt 420
 tgtgggaaac attaatgcct tcttgcaaca gc 452

<210> 482
 <211> 431
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-047-Q1-K1-D7

<400> 482

gcgctcagtc aactagccat ggtgaaccct gccgcctacc tacaacagca acaactgatg 60
 tcatttagcc ctctcgctga ggttaatgca cctacatacc tgcaacaaca gttgctgcaa 120
 cagattgtac cagctctgac tcagctagct gtggcaaacc ctgctgcta cttgcaacag 180
 ctgcttccat tcaaccaact gactgtgtcg aactctgctg cgtacctaca acagcgacaa 240
 cagttactta atccactagc ggtggctaac ccattggctg ctgccttctt acagcagcaa 300
 caattgctgc catacaacca gttctctttg atgaaccctg ccttggttggtg gcagcaaccc 360
 atcgttggag gtgccatctt ttagattaca tatgagatgt actcgataat ggtgcctca 420
 tagcggcatg t 431

<210> 483
 <211> 443

<212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB3061-047-Q1-K1-D8
 <400> 483

cccacgcgtc cgcaccaagc gaagcacatt agcaacaacc taacaacaat ggctaccaag 60
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 ccacaatgct cacttgctcc aagttccatt attacacagt tcctcccacc agttacttca 180
 atgggcttcg aacacccagc tgtgcaagcc tataggctac aacaagcaat tgcggcgagc 240
 gtcttacaac aaccaatttc ccagttgcaa caacaatcct tggcacatct aacaatacaa 300
 accatcgcaa cgcaacagca acaacaattc ctaccagcac tgagccacct agccatgggtg 360
 aaccctgccg cctacttgca acagcagttg cttgcatcan acccacttgc tctggcaaac 420
 gtagttgcaa accagccaca aca 443

<210> 484
 <211> 428
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-047-Q1-K1-D9
 <400> 484

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 gctcctgggt atttctgcaa gtgtgctac ggcgaccatt ttcccgcaat gtcacaagc 120
 tcctatagct tcccttcttc ccccgtaact ctcaccagcg gtgtcttcgg tatgtgaaaa 180
 cccaattctt caaccctaca ggatccaaca ggcaatcgca gctggcatct tacctttatc 240
 acccttgatc ctccaacaat catcagccct attacagcag ttacctttgg tgcatttatt 300
 ggcacaaaac atcagggcac aacaactaca acaacttggt ctagcaaacc ttgctgccta 360
 ctctcagcaa cagcagtttc ttccattcaa ccaactagct gcattgaact ctgcttotta 420
 attgcaac 428

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 <212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-047-Q1-K1-E1

<400> 485

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caacaattgt tgcaacagat tgtaccagct ctgactcaac tagctgtggc aaaccctgtt 120

gcctacttgc aacagctgct tccattcaac caactgactc tgtcgaactc tgctgcgtac 180

ctacaacagc gacaacagtt acttaatcca ttggtagtgg ctaaccattt ggctcgccgc 240

ttcctacagc agcaacaatt gctgccatac aaccagttct ctttgatgaa tcctgtcttg 300

tcgaggcagc aaccatcgt tggaggtgcc atcttttaga ttacatatga gatgtactcg 360

ataatggtgc cctcataccg acgtgtgttt cctagaaata atcaatatat tgaatgaaga 420

ttatctccg 429

<210> 486

<211> 428

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-047-Q1-K1-E10

<400> 486

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gcagaggacg ctatcgcgga gctggccgac gcgaacgcga agtcctgaa gaaggcggag 180

gagttcacgt cggcggggcga cggttgcggc gacgtggacc tgcggagccg gagccagcgc 240

aagatcctgg agcgcgtacg caagatgtcg gagaaggccg gtcggctgga gctggagctg 300

cagcggttcc agcacgcgct gctgcggcac gaggaggagc gcgcggcgag gcgcgcggctc 360

aaggcggcgg cgtccaccgt cgtgcagggt cagcggcggt cgcgggtgca tctggtggag 420

tacctcta 428

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<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-047-Q1-K1-E11

<400> 487

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tacacaaatg acccccgagg aagtcacgga gaattttggt agttttgaat gcatgattaa 180
gggctccaag aagatcatcg agcttgatga gccttcacaa tccgaggcgc aaccgcgtggc 240
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cgacaacgag gagatggccc taatcatcaa aagcttccgg caaatcctca agcaacggaa 360
ggggaaggac tacaaatccc gttccaagaa gggttgctac aagtgtggtg agccccgtca 420
ctttattgct aaa 433

<210> 488

<211> 433

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-047-Q1-K1-E12

<400> 488

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agctectata gcttaccttc ttaccccgta cctttcacca acgggtgcctt cagtatgtga 180
aaaccaatt cttgaaccct acaggatcca acaggcaatc gcagctggca tcttaccttt 240
atcaccttg atcctccaac aatcatcagc cctattacag cagttacctt tgggtgcattt 300
attggcacia aacatcaggg cacaacaact acaacaactt gtgctagcaa accttgctgc 360
ctactctcag caacagcaag ttcttccatt caaccaacta gctgcattga actctgcttc 420
ttatttgcaa cac 433

<210> 489

<211> 430

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-047-Q1-K1-D1

<400> . 489

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cacctacata cctgcaacaa cagttgctgc aacagattgt accagctctg actcagctag 180
ctgtggcaaa ccctgctgcc tacttgcaac agctgcttcc attcaaccaa ctgactgtgt 240
cgaactctgc tgcgtaccta caacagcgac aacagttact taatccacta gcggtggcta 300
acccattggg cgctgccttc ctacagcagc aacaattgct gccatacaac cagttctctt 360
tgatgaacce tgccttggtg tggcagcaac ccacggttg aggtgccatc ttttagatta 420
catatgagat 430

<210> 490

<211> 403

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-047-Q1-K1-B6

<400> 490

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tagtcttgaa acagtggcca atctatatta tactctctct gttctttctt ttttatttgt 180
cgcggtctag ttcaaaaatg aactagcggg cgacaaatat tcaagaacgg aggtagtata 240
tgacttagac gtaactttag tgcaccgaat gtagtcaacc tttgtttgct ttggacaatg 300
aggatttgct gttctaaaga cacaacaact acagctactg tggcatccta accttgctgc 360
ctactctgag taacataaaa aggggtggatg ctttaaagga tcc 403

<210> 491

<211> 412

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-047-Q1-K1-B7

<400> 491

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 ctcacaagct cctatagctt cccttcttcc cccatacctc tcaccagcgg tgtcttcaat 180
 gtgtgaaacc ccaattgttc aaccctacag gatccaacag gcaatcgcaa caggcatctt 240
 accattatca cccttgttcc tccaacaacc gtcagcccta ttacagcagt tacctttggt 300
 ccatttggtg gcacaaaaca tcagggcaca acaactacaa caacttgtgc tagcaaacct 360
 tgctgcatac tctcagcaac atcagtttct tccattcaac caactggctg ca 412

<210> 492
 <211> 458
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-047-Q1-K1-B8

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 gccctccttg cgcttcttgc ccttttagtg agcgcaacaa atgcgttcat tattccacag 120
 tgctcacttg ctccatgtgc cattattcca cagttcctcc caccagttac ttcaatgggc 180
 ttccaacatc cagccgtgca agcctacagg ctacaactag cgcttgccgc gagcgcctta 240
 caacaaccaa ttgcccaatt gcaacaacaa tccttggcac atctaaccct acaaaccatt 300
 gcaacgcaac aacaacaaca acaacagttt ctgccatcac tgagccacct agccgtgggtg 360
 aaccctgtca cctacttgca acagcagctg cttgcatcca acccacttgc tctggcgcaac 420
 gtagctgcat accagcaaca acaacagctg caacagtt 458

<210> 493
 <211> 425
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-047-Q1-K1-B9

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 gcaatggcgc tcttgacatt gttgactttg gtgaatccga tgatgaaaag cctgagaaac 120
 tggaagcatt gatcgctgct gttaacagca gtgatagcag tcacattggt catgtccctc 180

ctggtgaaaa tgctctctct gatgtcctcc taagcactcc tatatttact ggtgaagaag 240
 gtggaagtgg ttttgctgct tacgcagcag ctgccgtagc tactggagca tctggatttg 300
 aatttggtgt ggacccaaat gtagatccag agttggcact cgccctgcgg ttgtctatgg 360
 aagaagaacg agcaaggcaa gaggctattg caaaaaaggc tgcataagat acatctaata 420
 ccgaa 425

<210> 494
 <211> 377
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-047-Q1-K1-C1
 <400> 494

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 caacgcgtga tgagcggcgc ttggctgcgg agcaatggct ggcgacctac gggcggtggg 180
 ccgtgcgcga ggagaatgcc atcatgcacg gatcgacttg ggtgcccatt gatggttcgc 240
 gacgcctaata actggttaag cagctgctgc gcagcgcgcg tgcgtgagac ttggtgtgta 300
 cacggggcccc agcaatgaaa tcatgtcgtg actctctcag gggatgattc cgatatgac 360
 caatggcctc tgttttc 377

<210> 495
 <211> 404
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-047-Q1-K1-C10
 <400> 495

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 gccttgctga caggaagacc gcaaagtcc agaagaacat caccaggagg ggttctgtgc 180
 ctgaaaccac tgtcaagaag ggaaatgact accctgttgg cctcttagtg cttgggttct 240
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aggtggcttg agagccgtgc cacatgtaat gcccagtata gagagttgct tgatatacat 360
gcatccagct aggattgggt agcagctaaa atgttgaacg tgac 404

<210> 496
<211> 412
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-047-Q1-K1-C11

<400> 496

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ggcggcgcat atagcgcagc aactgacggc gatgtgcggc ctgcagcaga cgactgcatg 180
cccctacgct gctgccggcg gtgtccccc ctgaagaaac tatgggctgt agtatagccg 240
ctggctagct agctagttag gtcatttagc ggcgaagatt gagtaataat gtgtgacgca 300
tgaccatggg tggcagtgtc agcgtgagca atgacctgaa tgaacaattg aaatgaaaag 360
aaaaaagtat tgctccaaat caaacgttc ggtggtcaaa ctaaaaaggg cg 412

<210> 497
<211> 431
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-047-Q1-K1-C12

<400> 497

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caatgctcac aagctcctat agcttccctt cttcccccg acctctcacc agcgggtgtct 180
tctgtatgtg aaaacccaat tcttcaaccc tacaggatcc aacaggcaat cgcagctggc 240
atcttacctt tatcaccctt gttcctccaa caatcatcag ccctattaca gcagttacct 300
ttggagcatt tattggcaca aaacatcagg gcacaacaac tacaacaact tgtgctagca 360
aaccttgctg cctactctca gcaacagcag tttcttccat tcaaccaact agctgcattg 420
aactctgctt c 431

<210> 498
 <211> 428
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-047-Q1-K1-C2

<400> 498

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 cagacaccac cgtttcatct accgcctccg ttctatatgc cgcctccggt ctatctgccg 180
 ccgcagcagc agccgcagcc atggcaatac cccactcaac caccgcagct aagcccgtgc 240
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 gagttcctga ggcaaccagt cagcccggcg gcgacgccct acggctcgcc acagtgccag 360
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 gcgacata 428

<210> 499
 <211> 397
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-047-Q1-K1-C3

<400> 499

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 ttcttcccc atacctctca ccagcgggtg cttcagtatg tgaaaaccca attcttcaac 180
 cctacaggat ccaacaggca atcgcagcag gcattcttacc tttatcacc ttgttcctcc 240
 aacaaccgtc agccctatta cagcagttac ctttggtgca tttgttggca caaacatca 300
 gggcacaaca actacaacaa cttgtgctag caaaccttgc tgcctactct cagcaacagc 360
 agtttcttcc attcaacaa ctggctgcat tgaactc 397

<210> 500
 <211> 426
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-047-Q1-K1-C5

<400> 500

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gctatgactg gcgagatgac tctaaggggc cttgtattgc cagttggtgg tggttaaggac 180
aagggtacttg cggcacatcg ttatggaatc aagagagtaa ttttacctga aaggaacttg 240
aaggacttat cagaggttcc attaccaatt ctctacgaca tggagattct gcttgtgaag 300
cgcacgagg aagtactcga ccatgcttcc gaaggccgat gccacttag atcacgctcc 360
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gtacca 426

<210> 501

<211> 446

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-047-Q1-K1-C6

<400> 501

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agtcattggt acaaaccatc aaggcacagc agctgcagca actcgtgcta cctgtgatca 360
accaagtagc tctggcaaac ctttctcct actatcagca acaacaatgt cttccattca 420
accaactatc tacactgaac cctgct 446

<210> 502

<211> 400

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-047-Q1-K1-C7

<400> 502

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attattccac agtgctcact tgctcctagt gccattattc cacagttcct cccaccagtt 180
acttcaatgg gcttcgaaca tccagccgtg caagcctaca ggctacaact agcgcttgcg 240
gcgagcgctt tacaacaacc aattgcccaa ttgcaacaac aatccttggc acatctaacc 300
ctacaaacca ttgcaacgca acaacaacaa caacaacagt ttctgccatc actgagccac 360
ctagccgtgg tgaaccctgt cacctacttg caacagcagc 400

<210> 503

<211> 417

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB3061-047-Q1-K1-C8

<400> 503

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cgacgagtga tggctattcc ttggacatct ttgttggtga tggctgggag tatgaggctg 180
acattctcca aagtgcattg aggggaaggcg ttgataaaat aaagtacaga gcatggccgt 240
tggtagcgtc gatgtctgct aggatggatc accaaccatt ggaggtttct ccttcatctg 300
actttgtcca gataccagct gatgcagctg atgtttggga agtcgatctc aggcttctca 360
aatttgaaca aaaattagcg tctggatcat ntggatgatc ataccatggg acgtact 417

<210> 504

<211> 412

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-047-Q1-K1-C9

<400> 504

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 gtgaccgagc aggacttcga cactgcaac acgcgcatac ccggtccggc ggctccaagc 360
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<210> 505
 <211> 425
 <212> DNA
 <213> Zea mays
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 <400> 505

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 ttcccttctt ccccatacc tctcaccagc ggtgtcttca atgtgtgaaa acccaattgt 180
 tcaaccctac aggatccaac aggcaatcgc aacaggcatc ttaccattat cacccttggt 240
 cctccaacaa ccgtcagccc tattacagca gttacctttg gtccatttgg tggcacaaaa 300
 catcagggca caacaactac aacaacttgt gctagcaaac cttgctgcat actctcagca 360
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<210> 506
 <211> 439
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-051-Q1-K1-D8
 <400> 506

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 cttggcacat ctaaccctac aaaccattgc aacgcacaa caacaacaac aacagtttct 180

gccatcactg acccacctag ccgagggtgaa cctgtgcacc tacttgcaac agcagctgct 240
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 acagtttatg ccagtgtctca gtcaactagc catgggtgaac catgccgtct acctacaact 360
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<210> 507
 <211> 409
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-051-Q1-K1-D9
 <400> 507

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 tgaaaaccca actcttcaac cctacaggat ccatcaggca atcgcaacag gcatcttacc 240
 tttatcacc ttgttcattc aacaaccgat agccctatta cagcaattac ctatgaagca 300
 tttcatggca cctaacatca aggacatca cctacaacaa ctagggttat gaaaccttgc 360
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<210> 508
 <211> 441
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-051-Q1-K1-E10
 <400> 508

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 gcaagctcct atagcttccc ttcttcccc gtacctctca ccagcggtgt cttcggtatg 180
 tgaaaaccca attcttcaac cctacaggat ccaacaggca atcgagctg gcatcttacc 240
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tttattggca caaaacatca gggcacaaca actacaacaa cttgtgctag caaaccttgc 360
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<210> 509
 <211> 340
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-051-Q1-K1-E11
 <400> 509

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 tctcttccat tcaaccaact agcagcattg aactctgctg cttatttaca gcagcaacaa 180
 ctactaccat tcagccagct agctgatgtg agccctgctg ctttcttgac acatcatcag 240
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<210> 510
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 <212> DNA
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 <223> Clone ID: LIB3061-051-Q1-K1-E12
 <400> 510

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 gtctgtaccg ctcgtcattg gccagtttat ggacatggtc gacggcaaca acggcatcgt 120
 gggctctacc actggcagca actactacat gcggatcctc atcaccatca accgcgagtt 180
 gctcaagccg tcagcgttcg tcgcgttgca tagtcacttc aacgctctag tcgacgtgct 240
 gccgccggag gccgacttca gcatctcctt gttgggatcg tcggataaagc ccaacgtcac 300
 ttacaacgat attggatgat gttgcattca aaagca 336

<210> 511
 <211> 415

<212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-051-Q1-K1-E2
 <400> 511
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 ggctaccccc agcaatttct tccattcaac caactagcag cattgaactc tgctgcttat 120
 ttacagcagc aacaactact accattcagc cagctagctg atgtgagccc tgctgccttc 180
 ttgacacaac aacagttggt gccgttctac ctgcacgcta tgcctaacgc tggcaccctc 240
 ttacaactgc aacaattgct gccattcaac caacttgctt tgacaaaccc aacagtgttc 300
 taccaacaac ccatcattgg tggcgccctt ttttagattg cttatgaatt atagtccaat 360
 aatgaagttt tttggatgat gcttgtggcg ttccaaaaat aaaaagtaca ttttt 415

<210> 512
 <211> 314
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-051-Q1-K1-E3
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 tgggtgggct tctcctgct cgccggcgtg ctgctggctg tagcagccac ggccggggcg 180
 gaggacggag tggtcgaacg ggaccgcaag gaggacctgc ggtgggtgcaa gcaggcgtgc 240
 gagtggcagt acggaaagga cccccgcgg aagagggaat gcgagagcga gtgccgcgag 300
 cggaaccagc aagc 314

<210> 513
 <211> 260
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-051-Q1-K1-E5
 <400> 513
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ccggttcac tgccacctgc agggcacctt ccaactgcgg ggcacctacc accgacgac 120
cacctgccat cgcctgtcca cctgccacct tcagtccatg tgccgcctcc agtacatctg 180
ccgtcatcac catgccacta ccctactcaa ccgcccctac ctcaacctca ttcacagcca 240
cacccattcc catgccaaca 260

<210> 514
<211> 441
<212> DNA
<213> Zea mays
<223> Clone ID: LIB3061-051-Q1-K1-E6
<400> 514

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tggttcttgc ttctattgct ttagtatcaa gtgtttcttg tacacagaca ggccgctgca 120
gctgtggtca acaacaaagc catgagcagc aacatcatcc acaacaacat catccacaaa 180
aacaacaaca tcaaccacca ccacaacatc accagcagca gcaacaccaa caacaacaag 240
ttcacatgca accacaaaaa catcagcaac aacaagaagt tcatgttcaa caacaacaac 300
aacaaccgca gcaccaacaa caacaacaac aacaacagca ccaacaacaa catcaatgtg 360
aaggccaaca acaacatcac caacaatcac atggccatgt gcaacaacac gaacagagcc 420
atgagcaaca ccaaggacag a 441

<210> 515
<211> 374
<212> DNA
<213> Zea mays
<223> Clone ID: LIB3061-051-Q1-K1-E7
<400> 515

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tgaggagtgt cacatacgca cgctcacctt cgctctcggc agcgaacaga aggccaggga 180
cgcagtgttc taccactaca agaacgcctc cagcggttc tccgcgaagc tcaccgcaca 240
gcaggtcaag gatctcaagg agcatccagg tgttctacag gtatgtgccg agccagactt 300

accagctaca tggccctgag tatggcactc accagcgac gatacacacg ttgagcctta 360
tgtgaaagcg tatg 374

<210> 516
<211> 447
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB3061-051-Q1-K1-E8

<400> 516

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cgctccttgc cctccttgct ctttcagcaa gtgttgctac cgcgactatt attccacaat 120
gctcacaaca ataçctctct ccagtgatag ccgçgagatt tgaataccca tctatacaat 180
cctacaggct acaagaggcc atcacagcaa gcatcttacg gtcgtttagca ttgaccgtcc 240
aacaaccata tggccctattg caacaaccat ccttagtgaa tctgtatctc caaagaatca 300
cagcacaaca actacaacaa cggttgcttc caacaattaa tcaagtagtt gcagcgaacc 360
ttgctgctta ctttcagcaa caacaatttc ttccattcaa tcaactagct gnngtgaacc 420
ctgctgctta cttgcaggca caacagc 447

<210> 517
<211> 135
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-051-Q1-K1-E9

<400> 517

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gtaataataa atgttctcat actgatatgt gcaacttctc agtaataaaa gattagagat 120
ctatatttta agttc 135

<210> 518
<211> 239
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-051-Q1-K1-F1

<400> 518

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gcagcgcttt agaagcatga ctgtgaccgt cctgaccgtt ggtcctgctg caaccaggca 120
gcactattac tagaccgtac ctggaaggcc atttcgagca gctgagcatg agagaccaac 180
ctgctagaca actattgcat agacgagggtg ctgactactg ctcaggagca tcgcgtaca 239

<210> 519

<211> 375

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-051-Q1-K1-F10

<400> 519

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tattttctga agtgctgcta cggcgaccat tttcccgcaa tgctcacaag ctctatagc 120
ttcccttctt ccccgctacc tctcaccagc ggtgtcttcg gtatgtgaaa acccaattct 180
tcaaccctac aggatccaac aggcaatcgc agctggcatc ttacctttat cacccttggt 240
cctccaacaa tcatcagccc tattacagca gttacctttg gtgcatttat tggcacaaaa 300
catcagggca caacaactac aacaacttgt gctagcaaac cttgctgcct actctcagca 360
acagcagttt ctttc 375

<210> 520

<211> 403

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-051-Q1-K1-F11

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atgggcttcg aacattcagc cgtgcaagcc tacaggctac aactagcgct tgcggcgggc 60
gccttacaac aaccaattgc ccaattgcaa caacaatcct tggcacatct aaccctacaa 120
accattgcaa cgcaacaaca acaacaaca cagtttctgc catcactgag ccacctagcc 180
gtggtgaacc ctgtcaccta cttgcaacag cagctgcttg catccaaccc acttgctctg 240

gcgaacgtag ctgcatacca gcaacaacaa cagctgcaac agtttatgcc agtggtcagt 300
 caactagcca tgggtgaaccc tgccgtctac ctacaactac tttcatctat cccgctcgcg 360
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<210> 521
 <211> 410
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-051-Q1-K1-D7
 <400> 521

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 gctcgttgcc ctcgctctcc tggctctcgc tgcgagcgcc acctccacgc atacaagcgg 120
 eggctgcggc tgccagccac cgccgcccgt tcatctaccg ccgcccgtgc atctgccacc 180
 tccggttcac ctgccacctc cgggtgcatct cccaccgccc gtccacctgc cgccgcccgt 240
 ccacctgcca ccgcccgtcc atgtgccgac gccggttcat ctgccgcccgc caccatgcca 300
 ctacctact caaccgcccc ggctcagcc tcatccgcag ccacacccat gcccgtgcca 360
 acagccgcat ccaagctcgt gccagctgca gggaacctgc ggcgttggca 410

<210> 522
 <211> 396
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-051-Q1-K1-C3
 <400> 522

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 ctaccaagat attatccctc cttgcgcttc ttgcgctttt tgcgagcgca acaaatgcgt 120
 ccattattcc acaatgctca cttgctccta gttccattat tccacagttc ctcccaccag 180
 ttacttcaat ggccttcgaa caccagctg tgcaagccta taggctacaa caagcgattg 240
 cggcgagcgt cttacaacaa ccaattgccc aattgcaaca acaatccttg gcacatctaa 300
 caatacaaac catcgcaacg caacagcaac aacagttcct accagcactg agccacctag 360
 ccatggtgaa ccctgtcggc tacttgcaac agcagc 396

<210> 523
 <211> 449
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB3061-051-Q1-K1-C4

<400> 523

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 tgtgcctggc tctgtcagct gccagcgcct ctgcaatgca gatgccctgc ccttgcgcgg 120
 ggctgcaggg cttgtacggc gctggcgccg gcctgacgac gatgatgggc gccggcgggc 180
 tgtaccccta cgcggagtac ctgaggcagc cgcagtgcag cccgctggcg gcggcgccct 240
 actacgccgg gtgtgggcag ccgagcgcca tgttccagcc gctccggcaa cagtgtctgc 300
 agcagcagat gaggatgatg gacgtgcagt ccgtcgcgca gcagctgcag atgatgatgc 360
 agcttgagcg tgccgctgcc gncagcagca gcctgtacga gccagctctg atgcagcagc 420
 agcagcagct gctggcagcc cagggtctc 449

<210> 524
 <211> 196
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3061-051-Q1-K1-C5

<400> 524

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 tctcattcta ctataatttt acttgacta acacatatat taacatcact tattgatcta 180
 gattattcaa acttac 196

<210> 525
 <211> 416
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3061-051-Q1-K1-C6

<400> 525

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gcgccctcc gcgcgccgat ggccgccg cgccgccgc cgcgcgggga ggccgcgcc 120
gcgctgaagc ggagcgccag catcgaccgg ataccggcg acgcgcgcc catcctgcac 180
cgctcgccg gggacctctg gggcgccgac gtggaccccg gcgcgctggc cgtgtcccag 240
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ggcaacggcc cgcgcatggt gctcgtgcgc atctactggc gtggcgtcga ggtcttcttc 360
gaccgcgccg actaggtccg caccttcgag tgcatgtcgt gccacggtca ggggcc 416

<210> 526

<211> 465

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-051-Q1-K1-C7

<400> 526

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aagaataacg ttgagcaacc tgtttgtccg tcgggctggc ccaggcagca cggagctgac 120
cgtggaggga aggccatccg accagctggg caggagaaac ctactgaca gccccgtatt 180
tgacggccgt ggccctgacg ccagcctcgt ggctcgcgta caggagtcg ctaccagat 240
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gctcgtcacc gaaggcgcca tgacagaagg gtcagacgag tgggcgatct acggtggaac 360
tggagtgttc gcgatggcga gaggcgtcat aaggagaacg tttcttgccg acacgagcgg 420
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<210> 527

<211> 421

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB3061-051-Q1-K1-C8

<400> 527

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 tgacggccgt ggccctgacg ccagcctcgt ggctcgcgta caggagtcg ctacccatat 240
 gggcgacgtg cgccagttgt acaccgtcgt gttccatgag aggcgcgtca agggctccac 300
 gctcgtcacc gaaggcgcga tgacagaagg gtcagactag tggtcgatct acggtggaac 360
 tggaatgttc gcgatggcta gaggcgtaat taggagaacg tttcttgccg acacgagcgg 420
 t 421

<210> 528
 <211> 407
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-051-Q1-K1-C9

<400> 528

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 ccgccgccgc ctctgatctc cgcgaggttg tcaggattca atatgtcgac cagcacattc 180
 gctacttctt gcacgctggt gggcaatggt agaacaacgc aggcctccca gacagccgtg 240
 aagagccctt cgtctctaag cttcttcagc caagttacga aggttccaag cctgaagacc 300
 tccaagaaac tggatgtcta cgccatggct gcatacaagg cgaagcttgt cagacctgaa 360
 ggtgaagagc acgagctctga tgctccagac gacgcctaca ttcttga 407

<210> 529
 <211> 425
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB3061-051-Q1-K1-D1

<400> 529

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 ggcgctgatg gcggcccagg tagcgcagca gctgacggcg atgtgcggtc tgcagctgca 180

gcagccaggt ccctgccctt gcaacgcagc tgccggcggt gtctactact gaggaaacta 240
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 tcactcgttt agcggcgatg agtaacggag tgtcacccat caccatgggt ggcagtgtga 360
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 ttggg 425

<210> 530
 <211> 376
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-051-Q1-K1-D11

<400> 530

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 tgctctcaag ctctatagc ttcccttctt ccccggtacc tctcaccagc ggtgtcttca 180
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 gtgcatatat tggcacaaaa catcagggca caacatctac aacaacttga gctagcaaac 360
 cttgctggct actctc 376

<210> 531
 <211> 354
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB3061-051-Q1-K1-D2

<400> 531

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 tgctcgcaag ctctatagc ttcccttctt ccccggtacc tctcaccagc ggtgtcttcg 180
 gtatgtgaaa acccaattct tcaaccctac aggatccaac aggcaatcgc agctggcatc 240

ttacctttat cacccttggt cctccaacaa tcatacagccc tattacaaca gttacctttg 300
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<210> 532
<211> 442
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-051-Q1-K1-D3

<400> 532

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tggatggggtg tcctcctgct cggcggcggtg ctgctgggtcg tagcagccac ggccggggcg 180
gaggacggag tggatgaacg ggaccgcaag gaggacctgc ggtgggtgcaa gcaggcgtgc 240
gagtggcagt acggaaaagga cccccgcgg aagaggggaat gcgagagcga gtgccgcgag 300
cggcaccagc aagctgacgc gggcgaggac ggcgacagcg gcgtggacgc ctacgtctcc 360
cgctccggga gggcgagtg cggcgccag tgctgcgcc gtcacgaggg ccagccgtgg 420
gagaccagg agtgcattgag gc 442

<210> 533
<211> 353
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-051-Q1-K1-D4

<400> 533

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tggatggggtg tcctcctgct cggcggcggtg ctgctgggtcg tagcagccac ggccgtagcg 180
gaggacggag tggatgaacg ggaccgcaag gaggacctgc ggtgggtgcaa gcaggcgtgc 240
gagtggcagt acggaaaagga cccccgcgg aagaggggaat gcgagagcga gtgccgcgag 300
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<210> 534

<211> 449
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3061-051-Q1-K1-D5

 <400> 534

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 gaagtactcg tcccgcgacc tcgcccgcga tacctcgctc aagctcagaa aagacgggtca 180
 acagacccaa gaggagttac agaagaggaa tctcaggagg gaacttgagg aacgtgagcg 240
 caagcactac tcttcagcat aggacttatt cttggaagag accggcgga aagctcaagc 300
 cagctactcc tagaagggtc aaagagagag gcagaggata agatagttcc acgagaaatc 360
 gatgcagatg actccgatgt ggagcctaaa agtgatgatg agagcgatga agatggcgac 420
 gaagcagaca ccgaagctct aatggcaga 449

<210> 535
 <211> 446
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB3061-051-Q1-K1-D6

 <400> 535

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 caatgtctac aagctcctat agcttccctt cttcccccat acctctcacc agcgatgtct 180
 tcagtatgtg aaaatccaat tcttctaccc tacaggatcc aacaggcaat cgcagcaggc 240
 atcttacctt tatcaccctt gtctctccaa caatcatcag cctattaca gcagttacct 300
 ttgggtgatt tattggcaca naacatcagg gcacaacaac tacaacaact cgtgctagca 360
 aaccttgctg cctactctca gcaacagcag ttacctttgg tgcatttggt ggacacataac 420
 atcanggcac aacaactaca acaact 446

<210> 536
 <211> 82

<212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-051-Q1-K1-A8
 <400> 536
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 aaataagaag gtacatttct ag 82

<210> 537
 <211> 404
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-051-Q1-K1-B10
 <400> 537
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 acaaagatca tgtgagattt ctgatcgaga tatacagtac gaagggctca tcaagctgaa 240
 tcagggtttta gaaattgcct caaccactgt aaaagaaata gaaacaaaaa gggttgatct 300
 cagtgatatc caaggtaaaa gagagcaaga aaaacagcta gaatgcatcc tggtatttat 360
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<210> 538
 <211> 380
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-051-Q1-K1-B11
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 ctccgcgacc agctgggagt cctcggcagc gctcacctcc gccggcgtca agccccagcg 240
 cggctactac acgctgagcc agatcaaggg cgccatccgg caaggcaccc gcttcgagcc 300

ctacgtggag tgcaaccgct actaggccgg caacagccag ctctaccage tctacttctg 360
cgttgacgcc gccggcgaca 380

<210> 539
<211> 382
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-051-Q1-K1-B12

<400> 539

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gtgaggctgt acggcgacac cgtctggatg tccgccccca ccccgacat cccttccttc 180
cacgtcgcca ccaagctcgg cttccacaga ttgttccagt acctgatggg cgcaaacctc 240
aactcttcga ggatcaggat gaccacccct gtgctcacga gtgtgggttc aggtgcaggg 300
cctctgcgct cctcggccta ctccgtccgg ctgtacctgc cggcgaagtt ccaggcttac 360
cctgccgttc ctctcccga gc 382

<210> 540
<211> 254
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-051-Q1-K1-B2

<400> 540

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ggacgagcag ctggacgatg gccgcgctgt ctgggactac atcatacata atgcgagcac 120
cctcaaccat gatatacgcc ttaggattgg tatgcagatc attgcgaaga ccctgactgg 180
aataaccata gccctggagg atgtcagctc ggacactatc tacaatgtgt aagctgatat 240
ccatgacaag gatg 254

<210> 541
<211> 433
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-051-Q1-K1-B3

<400> 541

ccgatcccca attcctcctt cggatctcgc attcagcgca gcgcaggtgt gaaggagggg 60
ggacgcggag gaagatgggg ctgcggttcg ggaagctctt cagccggctc ttcgccaaga 120
aggagatgcg gatcctcatg gtcggcctcg acgccgccg taaaaccacc atcctctaca 180
agctcaagct cggcgagatc gtcaccacca tccccacat cggtttcaat gttgaaactg 240
ttgagtacaa gaacattagc ttcactgtct gggatgtcgg gggtcaggac aagatcagac 300
ctctttggag gcattacttc cagaacaccc aggtcttat ctttgctgtg gacagcaatg 360
accgtgaccg tgttgttgaa gccagagatg agtccacag gatgctgaac gaggatgagc 420
tacgtgatgc tgt 433

<210> 542

<211> 393

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-051-Q1-K1-B4

<400> 542

cagaaacaca ccaagcgaag cgcactagca acgacctaac aacaatggct accaagagat 60
tagccctect tgcgcttctt gccctttttg tgagcgcaac aaatgcgttc attattccac 120
aatgctcact tgctcctagt gccattattc cacagttcct cccaccagtt acttcaatgg 180
gcttcgaaca cctagctgtg caagccaaca tgcaacaaca agcgcttgcg gcgagcgtct 240
tacaacaacc aattgcccaa ttgcaacaac aatccttgcc acatctaaca atacaagcca 300
tcacaacgca acagcaacaa cagttcctac cagcactgag ccacctagcc atggggaacc 360
cttgccgcta cttgcaagag cagctgcttg cat 393

<210> 543

<211> 159

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-051-Q1-K1-B5

<400> 543

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aacccttggtg aacgtttgtt ctgaacataa ctggaactct gcatttgctt gtatgacatg 120
cgtatgggttc aggaagttaa attccaatat ttgggtcact 159

<210> 544
<211> 433
<212> DNA
<213> Zea mays
<223> Clone ID: LIB3061-051-Q1-K1-B6
<400> 544

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ttgtgctagc aaaccttgct gcctactctc agcaacagca gtttcttcca ttcaaccaac 120
taggttcatt gaactctgct tcttatttgc aacaacaaca actaccattc agccagctac 180
ctgctgcta cccccagcaa tttcttccat tcaaccaact agcagcattg aactctcctg 240
cttatttaca gcagcaacaa ctactaccat tcagccagct agctgggtgtg agccctgcta 300
ccttcttgac acaaccacag ttgttgccgt tctaccagca cgttgccgct aacgctggca 360
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gtgttctacc aac 433

<210> 545
<211> 437
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB3061-051-Q1-K1-B7
<400> 545

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tgcgcggggc tgcagggctt gtacggcgct ggcgcgggcc tgacgacgat gatgggcgcc 180
ggcgggctgt acccctacgc ggagtacctg aggcagccgc agtgcagccc gctggcgggc 240
gcgccctact acgccgggtg tgggcagccg agcgccatgt tccagccgct ccggcaacag 300

tgctgccagc agcagatgag gatgatggac gtgcagtccg tcgcgcagca gctgcagatg 360
atgatgcagc tngagcgtgc cgctgccgnc agcagcagcc tgtacgagcc agctctgatg 420
cagcagcagc agcagct 437

<210> 546
<211> 387
<212> DNA
<213> Zea mays
<223> Clone ID: LIB3061-051-Q1-K1-B8
<400> 546

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tagccctcct tgcgcttctt gcccttttag tgagcgcaac aaatgcgttc attattccac 120
agtgtcact tgctcctagt gccattattc cacagttcct cccaccagtt acttcaatgg 180
gcttcgaaca tccagccgtg caagcctaca ggctacaact agcgcttgcg gcgagcgctt 240
tacaacaacc aattgcccac ttgcaacaac aatccttggc acatctaacc ctacaaacca 300
ttgcaacgca acaacaacaa caacaacagt ttctgccatc actgagccac ctagccgtgg 360
tgaaccctgt cacctacttg caacagc 387

<210> 547
<211> 382
<212> DNA
<213> Zea mays
<223> Clone ID: LIB3061-051-Q1-K1-B9
<400> 547

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gctacttcga tgcaataatg acctttcccc agaactatac caacagaccg ccatcagtaa 120
gattcacttc tgggatgcgg catccgaatg tttatacggg tggctgtgtt cagcatcatc 180
tattcttcat ccacctgctg aagatcccag tggttatgag cttgcacgcg aacggtggac 240
accagtgcac acggttgaaa gtatagttct gagcatcatt acaatgctat ctattccgaa 300
tgacgagtct ccagcagata ttgaagctgc caaggactgg atagagaagc gggatgagtt 360
caagaagaag gttaggcaat gt 382

<210> 548
 <211> 444
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB3061-051-Q1-K1-C1

 <400> 548

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 tggggccttac atagctccag tcaaagggaa gacctcagaa agagttgaag atgttgacct 120
 gctgattagg agggcagaga gatgcttggg agcaggcgct gatatgatca tgatcgatgc 180
 tgatgatgtt tgccagcgtg ctgaatctct gaggacagac atcatcgcca agattgtagg 240
 ccggctcggg cttgataaaa ccatgtttga agcttccaac tccaacacct cggagtgggt 300
 cgtcagacgt tatggcccaa gggtaaactc ctttgttgaa cactctgacg tgatgaatct 360
 ggagcgctn cggggcttca acatgcgcag aagcaactcg gnccttcggt ttgcctcgnc 420
 gttctttctg atctaattggg ctaa 444

<210> 549
 <211> 403
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3061-051-Q1-K1-C10

 <400> 549

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 gctccttat gctccttggg ctttctgcaa gtgctgctac ggcgaccatt ttcccacaat 120
 gctcacaagc tectatagct tcccttcttc ccccgtaact ctcaccagcg gtgtcttcgg 180
 tatgtgaaaa cccaattctt caacctata ggatccaaca ggcaatcgca gctggcatct 240
 tacctttatc acccttggtc ctccaacaat catcagccct attacagcag ttacctttgg 300
 tgcatttatt ggcacataac atcaaggcac aacaactaca acaacttggt ctagcaaacc 360
 ttgctgcta ctctcaaaa caacagtatc ttccattcaa cca 403

<210> 550
 <211> 230

<212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-051-Q1-K1-C12
 <400> 550
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 tcttttagat tgcttatgag tcatagttca atagtgaagt tttcttggat gatgtttgcg 120
 gcgtcccaga aataagatag tacatttcta gattcttaac acataacatc aaagaccgat 180
 acactatgtg aaaacacatc tcttaaacca tacgaagctt gaacgcgcta 230

<210> 551
 <211> 443
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-051-Q1-K1-A6
 <400> 551
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 gctgcttcgt cggcggcctc gcctgggcca cggacgacca ctccctccac aacgccttca 120
 gcacctacgg cgaggtcctc gagtccaaga tcatcctcga tcgggagacg cagaggtccc 180
 gcggcttcgg ctctgtcacc ttctccacgg aggaggcgat gcggaacgcc atcgagggca 240
 tgaacggcaa ggagctggac ggccgcaaca tcaccgtcaa cgaggcccag tcccgcggcg 300
 gccgtggaag cggcggcggc ggctacggtg gtggccgtgg aggcggcggc tacggcggtg 360
 gcgggcgcgg tgatggctgc ggcggctaca gccgttggcg cggcggctac ggtggcggca 420
 gtggctacgg tgggtggtgt ggc 443

<210> 552
 <211> 252
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-050-Q1-K1-D1
 <400> 552
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 atgtgcatgc gccgccttgt caagtttatg gaaggaaagg agaagaacat tgctgtcatt 120

gttggcacag tcacagatga caaaaggatc caggagggttc cagcaatgaa ggttactgcc 180
 ctgagggttca cggagacagc aagggccaag attgtcaatg ctggtggcga atgcctcaca 240
 tttgaccagc tt 252

<210> 553
 <211> 392
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-050-Q1-K1-D10
 <400> 553

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 agatgggtatc cctctttgcg cttcttgccc tttttgtgag cgcacaaat gcgttcatta 120
 ttccacaatg ctcacttgct cctagtgccca ttattccaca gttcctccct ccagttactt 180
 caatgggctt cgaacaccca gctgtgcaag cctacaggct acaacaagcg cttgcggcga 240
 gcgtcttaca acaaccaatt gcccaattac aacaacaatc cttggcacat ctaaccatac 300
 aaaccatcgc aacgcacag caacaacaat ttctaccagc actgagccaa ctagctgtgg 360
 tgaaccctgt cgctacttg caacagcagt tg 392

<210> 554
 <211> 428
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-050-Q1-K1-D11
 <400> 554

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 caacagtaga gcaacaatgg cgaccaagat attttccctc cttatgctcc ttgctctttc 120
 tacatgtgtt gctaacgcga caattttccc tcaatgctca caagctccta tagcttccct 180
 tcttccccca taccttccat caattatagc ttcagtatgt gaaaaccag ctcttcaacc 240
 atataggctt caacaagcaa tcgcagcaag caacatacct ttatcgccct tggtgtttca 300
 acaatcacca gccctatctt tgggtgcagtc attggtacaa accatcaggg cacaacagct 360
 gcagcaactc gtgctacctg tgatcaacca agtagctctg gcaaaccctt ctcctactc 420

tcagcaac

428

<210> 555
<211> 435
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB3061-050-Q1-K1-D12

<400> 555

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ccagctgaat ccgtcgccgt cgtcgtcgtc gttttcgttc ccatcgtcac aagtccagta 120
ccaaacgtgc cagcgcgacg tcgacaggca caacgtctgc gccatggagg tgaggcacag 180
cgtcgaacgg ctggaccagg ccgacgtcta cagccctggg gctgggagga tcacacgcct 240
taccagccac aagttccccg tcttcaacct cgtacagatg agcgcggtgc gggtagacct 300
gtaccaggac gccatcatgt cgccgttctg gaacttcaac gcccacagcg ccatgtacgg 360
catcaggggc agtgcaaggg tccatgtcgc cagcgacaac gggaccacgg tgttcgacga 420
cgtgctncgt gcggg 435

<210> 556
<211> 445
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-050-Q1-K1-D2

<400> 556

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tactgcttgg tctttctgca agagctgcta cagcgaccat tttcccgcaa tgctcgcatg 120
ctctatcac ttacatactt cccccgtacc tatcaccatc cgtgtcttaa gtatactaaa 180
accaattct tcaaccctac aggatccaac atgcaatctc atctggcatc ttacctttat 240
cacctcagt cctccaacaa tcatcaaccc tattacaaca cttacctctt gagcatttat 300
tggcacaaaa catcagggga caacaactac aacaacttgt gctaacaaac cttgatgcct 360
actatcatca acagcagctt cttccattca accaactaag ttcattgaac tctgcttgtt 420

atttgcaaca tcaacgacta ccatt

445

<210> 557

<211> 462

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-050-Q1-K1-D3

<400> 557

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tctgctggcg ctcgctgcta gcgccgcctc cagtacaagc ggcggtgtg gctgccagac 120

accaccgttt catctaccgg ctccgttcta tatgccgtct ccgttctatc tgccgccgca 180

acagcagccg cagccatggc aataccccac tcaaccaccg cagctaatacc cgtgccatca 240

gttcggatcc tgctgggtca gcagcgtccg cagcccgttc ctgggccagt gcgtcgagtt 300

cctgaggcac cagtgcagtc cggcggcgac gccctacggc tcgccacaat gccaggcgct 360

gcagcagcag tgctgccacc agatcatgca agtagagccg ctgcaccggt accaggccac 420

ataccgtgtg gtccctgcagt cctttctgca gcatcatccg ca 462

<210> 558

<211> 449

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-050-Q1-K1-D4

<400> 558

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gatggaacag gcaatctcaa caggcatctt accattatca cccttgttcc tgcaacaacc 120

gtcagcccta ttacagcagt tacctttggt ccattttggtg gcacaaaaca tcatggcaca 180

acaactacaa caacttgtgc tagcaaacct tgctgcatac tctcagcaac atcagtttct 240

tccattcaac caactggctg cattgaactc tgctgcttat ttgcaacaac aattaccatt 300

cagccagcta gttgctgcct acccccagca atttcttcca ttcaaccaac tagcagcatt 360

gaactctgct gcttatttac agcagcaaca actactacca ttcagccagc tagctgatgt 420

gagccctgct gcctttttga cacaacaac 449

<210> 559
<211> 449
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-050-Q1-K1-D5

<400> 559

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cgacgaagat attttccttc gttatgctcc ttgctctttc tacatgtgct gctaacgcga 120
caattctcca tcaatgctca caagctccta tagcttccct tattccacca taccttgcat 180
caattatagc ttcagtatgt gacaacccag ctcttcaacc atatatgctt caacaagcaa 240
tcgcagcaag caacatacct ttatcgccct tgttgcttca acaatcacca gccctatctt 300
tggtgcagtc attggtacaa accatgacgg cacaacagct gcagcaactc gtgctacctg 360
tgatcaactc aatccctctg gcaaaccctc tctcctactc tcaacaacaa caatttctcc 420
catttaacca actgtctaca ctgaaccct 449

<210> 560
<211> 197
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-050-Q1-K1-D6

<400> 560

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atgagccctc cttgcgcttc ttgccctttt tgtgagcgca acaaatgcgt tcattattcc 120
acaatgctca cttgctccta gtgccattat accacagttt ctccgaccag ttacttcaat 180
gggcttcgaa cacctag 197

<210> 561
<211> 312
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-050-Q1-K1-D7

<400> 561

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tatggtcctt ggtctttctg caaatgctgc taccgcaacc attttccac aatgctcaca 120
agcttctata gcttccttta ttaccacata cctatcacca gcggtgtctt cagcatgtga 180
aaaccaatt cttcaaccct acaagatcca acaggcaatc gcagcaggca tcttaccttt 240
atcaccttg atccttcaac aaccagtagc cctattacag ggagtacctt tgggtgcattt 300
gttggcacia aa 312

<210> 562
<211> 398
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-050-Q1-K1-D8

<400> 562

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gctggtggtg gagcacggca tcccagagga ggtgatgcgc gacatgctgg aggtgtgcga 180
ggagtcttc cagctgccg cggcgagcaa ggcgtacatg tactcggagg acagtcaag 240
accaaccgg atcttctacg gcacaacctc cgacacgggc ggcgacaagt actggcgga 300
cttgctccgt ctgggtggc ccttgttctt cccggtcggc agcggcacia gggacgactg 360
ggcggacacg cccaacggc tgaagggtgt cgaggaac 398

<210> 563
<211> 429
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-050-Q1-K1-D9

<400> 563

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tcccggctta tgctccttgc tctttctgca tgtgttgcta acgcgacaat tttccctcaa 120
tgctcacaag ctccatagc ttcccttctt ccccatacc ttccatcaat gatagcttca 180
gtatgtgaaa acccagctct tcagccctat aggtccaac aagcaatcgc agcaagcaac 240

atacctttat cacccttggt gtttcaacaa tcgccagccc tatctttggt gcagtcattg 300
 gtacaaacca tcagggcaca gcagctgcag caactcgtgc tacctgtgat caaccaagta 360
 gctctggcaa acctttctcc ctactctcag caacaacaat ttcttccatt caaccaactg 420
 tctacactg 429

<210> 564
 <211> 447
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-050-Q1-K1-E10
 <400> 564

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 gcaaaagctt caggctggaa accgccagct ttatcgattg aagggttgc taatgcctca 120
 ggttcgcaag cattgtatcc tacgcaaggg agcacaaaat cttcaggttg tcagcgatca 180
 agttcatccc cagatgggaa tagaaaagcc ccaggttggc aacagtcaag tacatcacccg 240
 gtggggagtg gaaaagctca tggctggcaa cgatcaggtt cttttaccca ggggtgtaca 300
 aaagctgcag gttggcaacc ctctggttct tctacagatc ggagtgcaaa agttgatggc 360
 tggcaacgaa caagttcatc tccggaggga aacagaaaag cttcaggctg gcattcatca 420
 ggtcgtgaga gctcaaagat cacatat 447

<210> 565
 <211> 417
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-050-Q1-K1-E11
 <400> 565

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 ttctgtgaac acgccaagaa gttcactcag gtcgtcttcc tgaaggtgga cgtggacgaa 180
 gtgaaagaag tcaccgcggc ctacgaggtc gaggcgatgc cgaccttcca cttcgtcaag 240
 aacggcaaga cggtcgcgac catcgtgggt gccaggaagg acgagctcct ggccctgac 300

gagaagcatg ccgcgcctgc gcctgcgact gcgtctgcct aaatgagatc agatcaatcg 360
tcgccgtcaa taaaggccag cacgtatggc ttgaaatggt gtcgttatca gtttctg 417

<210> 566
<211> 437
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-050-Q1-K1-E12

<400> 566

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acagtgcaaa ccacgcgaac gcaacagcaa caacaattcc taccagcact gagccaccta 120
gccatggtga accctgccgc ctacttgcaa cagcagttgc ttgcatcaaa cccacttgct 180
ctggcaaacg tagttgcaaa ccagccacaa caacagctgc aacagtttct gccagcgctc 240
agtcaactag ccattggtgaa ccctgccgcc tacctacaac agcaacaact gctttcatct 300
agcccgctcg ctgtggccaa tgcacctaca tacctgcaac aacaattggt gcaacagatt 360
gtaccagctc tgactcagct agttgtggca aaccctgctg cctacttgca acagctgctt 420
ccattcaacc aactgac 437

<210> 567
<211> 421
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-050-Q1-K1-C9

<400> 567

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ggaggctggg tgccaggccc ccgagggacc catcctctgc atcaataact gtggcttctt 180
cggcagcgcg gcgaccatga acatgtgctc caagtgccac aaggagatga taacgaagca 240
ggatcaggcc aagctggctg cctcctctat cgacagcatc gtgaacggca gcgacgcgt 300
catggagccg gttgttgctg gcagcaacac ggtagtagct gttgccaag ttgagttgca 360
aacaatgaac gtgcagcaac ccgctgatgt tgccggaccc agcgaggggg tggcggcgat 420

<210> 568
<211> 445
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-050-Q1-K1-B3

<400> 568

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ccttggtgctg cttggtcttt ctgcaagtgt tgctaccgca accattttcc cacaatgctc 120
acaagctcct atagcttccc ttcttcccc atacctctca ccagcgggtgt cttcaatgtg 180
tgaaacccca attgttcaac cctacaggat ccaacaggca atcgcaacag gcattcttacc 240
attatcaccc ttgttctctc aacaaccgtc agccctatta cagcagttac ctttggtcca 300
tttggtggca caaaacatca gggcacaaca actacaacaa cttgtgctag caaaccttgc 360
tgcatactct cagcaacatc agtttcttcc attcaaccaa ctggctgcat tgaactctgc 420
tgcttatttg caacaacaat tacca 445

<210> 569
<211> 462
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-050-Q1-K1-B4

<400> 569

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caatgctcac aagctectat agcttccctt ctctcttcat acctctcacc aaacgtgtct 180
tcaatttggt aaacccaat tgttcaacct taccttatcc aacaagcaat tccaacaagc 240
atcttaccat tatcaacctt gttactccaa caaccgtaa ccctattaca acaattacct 300
ttggtccatt ttgtggcaca aacattaat gcacaacaac taccacaact tgtgctaaca 360
aaccttactt catactctta acaacatcaa tttctttcat tcaaccaact tgcttcattg 420
aactctactg cttattttca acaacaatta ccattcaatc at 462

<210> 570
<211> 378
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-050-Q1-K1-B5

<400> 570

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aatggaaaac aactacgcat gccaccacc cagcaaggga aacctgatca cagtcttgag 120
catcgatggg ggtgggggtca agggcgctcat cctgctacc ttccttgcat tccttgagtc 180
taaactgcag gtaaactcta cacgctcatt ggtccttgag cctaaatgca tatatacatg 240
caagtttgag tgccatttat tcgttggtgt tcttctacat tttcctagga gcttgatggg 300
agcagcgcgc gcatagctaa ctactttgat gtcacgctg gaacaagcac aggtggactt 360
attgctgcaa tgctggca 378

<210> 571
<211> 466
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-050-Q1-K1-B6

<400> 571

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ggcgggtgtg attacttgaa gaagcagggt ggccctgcgt ccaaggagat caagtcacca 120
gaagatgcga cggcccttat cgatgacaag aagatctaca ttgttggtat cttcgctgaa 180
ttcagcggca ccgaatttac aaacttcatt aaggctgcag agaagctgag gtctgactac 240
gactttggcc acactttgca tgccaaccac cttccacgtg gtgatgcagc agtggaaagg 300
ccattgggtc ggctgctgaa gccatttgat gagcttggtg ttgacagcaa ggattttgat 360
gtcgtgcac tgatgaagtt tattgatgct agcaccatcc ctagagttgt cacttttgac 420
aagaaccctg acaaccacc atacctcatg aaattcttcc aaagct 466

<210> 572
<211> 349
<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-050-Q1-K1-B7

<400> 572

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cggtttcgtg ggtgagcggg tcgagatggc ggcgtcggat gttgagtacc gctgcttcgt 120
cggcggcctc gcctgggcca cggacgacca ctacctccac aacgccttca gcacctacgg 180
cgaagtcttc gagttcaaga tcctcctcga tcgggagacg caaaagtccc gcggcttcgg 240
cttcgtcacc ttcttcaactg aggacgcgat tcggaacgcc atcgaaggca tgaaccgcaa 300
ggagctggac ggtcgcaaca tcaccgtcaa cgaggcccag tcccgcggc 349

<210> 573

<211> 434

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-050-Q1-K1-B9

<400> 573

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gttgggctcc ttatgctcct tgggtcttct gcaagtgtg ctacggcgac cattttcccg 120
caatgctcgc aagctcctat agcttccctt cttcccccg acctctcacc agcgggtgtct 180
tcgggtatgtg aaaacccaat tcttcaaccc tacaggatcc aacaggcaat cgcagctggc 240
atcttacctt tatcaccctt gttcctccaa caatcatcag ccctattaca acagttacct 300
ttgggtgcatt tattggcaca aaacatcagg gcacaacaac tacaacaact tgtgctagca 360
aaccttgctg cctactctca gcaacagcag tttcttccat tcaaccaact aggttcattg 420
aactctgctt ctta 434

<210> 574

<211> 430

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-050-Q1-K1-C11

<400> 574

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 gctagcagag cggcaggcac ctccctcctc aaggaacatg gcccgcacgc agcagttggc 120
 agtagtggcg accgccgtgg tggccttggg gctgctggcg gcggcggtta cctcggaggc 180
 ggccatcagc tgcgggcagg tggcgctggc catcgcgccc tgcattctct acgcgcgcgg 240
 ccaggggctcg gggccctccg ccggctgctg cagcggcgctc aggagcctca acaacgccgt 300
 ccgcaccacc gtcgaccgcc gcgcgctctg caactgcctc aagaacgccg tcgccggcgt 360
 cagcggcctc aacgccggca acgcgctcag catccctcc aagtgcggcg tcagcatccc 420
 ctacaccatc 430

<210> 575
 <211> 429
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-050-Q1-K1-C12

<400> 575

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 agagagtttt gtgcatttgg gggccggggg caagagagag agagagagcc atggcggcgg 120
 accagcagcc gcagctgcag gaggagatga acgactctgc cggcggcggc ctcagggtgc 180
 ctccaggggtt ccgcttccac ccgagcgact tcgagattgt cagcttctac ctcaccaaca 240
 aggtgctcaa cgcgcgttc acctgcaccg ccatcacgga ggccgacctt aacaagattg 300
 agccatggga cctcccgagc aaggcgaaga tgggcgagaa agagtgggtac ttcttctacc 360
 agaaggaccg caagtaccgc acggggctga aggcgaaccg ggccaccgag gccgggttact 420
 ggaaagcga 429

<210> 576
 <211> 200
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-050-Q1-K1-C2

<400> 576

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ctgggtccgg tgaccatggc gaccagatc agcaagaaga agaagttcgt cagcgacggc 120
 gtgttctacg ccgagctcaa tgagatgctg acgcgggagc tcgcggagga cggctactcc 180
 cgcgtaggagg tgcgtgtcac 200

<210> 577
 <211> 452
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-050-Q1-K1-C3
 <400> 577

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 tatgcctctt tgcgcttctt gccctttttg tgagcgcaac aaatgcgttc attattccac 120
 aatgctcact tgctcctagt gccattattc cacagttcct tcctccagtt acttcaatgg 180
 gcttcgaaca ccagctgtg caagcctaca tgctacaaca agcgcttgcc gccagcgtct 240
 tacaacaacc aattgcccac ttacaacaac aatccttggc acatctaacc atacaaacca 300
 tcgcaacgca tcagcaacaa caatttctac cagcactgag ccaactagct gtggtgaacc 360
 ctgtcgcta cttgcaacag caattgcttg cattcaaccc acttgctctg gcaaacatag 420
 ttgcatacca actacaacaa caattgcaac ag 452

<210> 578
 <211> 429
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-050-Q1-K1-C4
 <400> 578

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 tatcgctctg tgctcttcgc gccctttacg tgagctcatc acatgcgttc attattccac 120
 agtgctcact tgctcctagt gccattattc cacagttact tcctacagtt acttcaatga 180
 gcttcgaaca cccaactgtt caagccttct agctacaaca agctcttgcc accagcctct 240
 aacaacatcc aattgcccac ttacaacaac attccttggc tcacttaacc atacaaacta 300
 tcgcaactca tcaacgtcaa caatttctac cagcactgag ccaactagct taagcgaacc 360

ctgtctgcta attgcaacag catattcttg cattcaaccc actttctctt gcaaacatag 420
gtgcataacc 429

<210> 579
<211> 400
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-050-Q1-K1-C5

<400> 579

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acagtgaacc ctgctgctta ttcgaagcaa caactattac catttagcca gctagctact 120
gcctactatg agcaacaaca acttcttaca tttaaccaat tggacgcact gaacctcact 180
gcttatttgc agcaccaaact actactggca tttaacgagc tagctgcaac aagtcatgct 240
tccttcttga cacaggaaca gctgctggct ttctacaagc agtttgcgga taaccccgaa 300
accctcttac aactacaaca attgctggcc ttgtccaac ttgatttgac aaaccaaca 360
accttctacc aacaacacat caatggtggt gccctatttt 400

<210> 580
<211> 401
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-050-Q1-K1-C6

<400> 580

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ccggggctgc tgaaatagct gctaaaaggt gactaccttt tcttcttctt ccccggaac 120
atcttgtgag gacgagatgt ggttctgtga ctgttgccgt gtacggagac gaggacaagc 180
cagcgcttat aacgtaccgc gatgtagctc tgaactacat gtcctgtttc caaggattct 240
tcttctgccc ggaagtggcg tctttgctgc tacacaactt ctgctgtctac cacaccaatc 300
cccatgggca cgaggagtcc tacagatggg agcagctaca atgtcgtcag atgtgccggt 360
gccatctggt gctgatctcg ctgatcaagt tgcaaatgtg c 401

<210> 581

<211> 297
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-050-Q1-K1-C8

<400> 581

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ctgggggacgg tacgggaaat agaccgtgac gagaggaccc gtgaacgttc gcatgaccgg 120
actcgtgata gagatctacg agatgagaag catcaccata gagaccgtga gaggactcgg 180
gatagggaga gaggaacgga ccgtgagcga taccacggac gtgaccggga gcatgatcgt 240
catgacttgg tcctagatcg tggctctggac tatgatagag aaagggaccg.tggtcgg 297

<210> 582
<211> 429
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-050-Q1-K1-B2

<400> 582

cagaaacaca cctagcgaag cgcactatca tcgacctaac aacaatggct tccaagacat 60
tatcgctact tgcgcttctt gccctttatg tgagtgcac aaatgcgttc attattacac 120
aatgctcact tgctccgagt gccattattc cacagttcct ccatccagtt acttcaatgg 180
gcttcgaaca cccaactgtg caagcctata ggctacaaca agcgcttgca gcgaacgttt 240
taaaacaacc aattggccaa ttacaacaac aattcttggc acatctaacc ataccaacca 300
tcgcaacgca gcagcaacaa gactgagcc acctagccgt ggtgaaccct atcggtact 360
tgcaacaaca gctgcttgca ttcaaccac ttgctttggc aaacgtaact gcataccaac 420
aacaacaac 429

<210> 583
<211> 455
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-049-Q1-K1-H7

<400> 583

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tatgggtccat ccttatgctc cttgctcttt ctgcatgtgt tgctaacgcg accatttttc 120
ctcaatactc acaagctcct atagctgccc ttcttccccc ataccttcca tcaatgaccg 180
cttttagtatg tgaaaaacca gcccttcaac cctacaggat ccagcaagca atcgcaacaa 240
gcaacttacc tttatcacac ctgttctttc aacaatcgcc agccctatct ttgggtgcagt 300
cattggtaca aaccatcagg gcagaacagt tgcagcaact cgtgctacca gtgatcagcc 360
aagtagctct ggcaaacctt tccccctact ctcagcaaca acaatttctt ccattcaacc 420
aactgtctat actgaaccct gctgcttatt tgcag 455

<210> 584
<211> 233
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-049-Q1-K1-H8

<400> 584

aaaaagcaac ataaaaagag aaatacaaaa ttcaaaaata tagcaacaat ggcggaacccg 60
gaatgggggc attcttatgc tccttgctct tgctacatgc gagggtaaca caaacattgg 120
ccctcaattc tcgcaagcta atgtagctac cctgaatacc ccataccttc catccatgat 180
cgatttcta agcgaaaacc caggccttga tctttacagg attcacctg caa 233

<210> 585
<211> 434
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-049-Q1-K1-H9

<400> 585

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tccttgcttg tgctccttgc tctttctaca tgtgttgcta acgcgacaat ttccctcaa 120
tgctcacaag ctctatagc ttcccttctt ccccatacc ttccatcaat tatagcttca 180
gtatgtgaaa acccagctct tcaaccatat aggcttcaac aagcaatcgc agcaagcaac 240
atacctttat cgcccttggt gtttcaacaa tcaccagccc tatctttggg gcagtcattg 300

gtacaaacca tcagggcaca acagctgcag caactcgtgc tacctgtgat caaccaagta 360
gctctggcaa acctttcttc ctactctcag caacaacaat ttctttcatt caacccactg 420
gctacactga accc 434

<210> 586
<211> 353
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-050-Q1-K1-A1

<400> 586

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agtgcctact tgctcctagt gccagtattc cacagttcct ccaaccagtt acttcaatgg 180
gcttcgaaca tccagccgtg caagcctaca ggctacaact agcgcttgcg gcaagcgctt 240
tacaacaacc aattgcccac ttgcaacacc aatccttggc acatttaacc ttacaaacca 300
ttgcaacgca ccaccaacaa caccagtttt tgccatcact gagccaccta gcc 353

<210> 587
<211> 349
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-050-Q1-K1-A10

<400> 587

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ttttgctcc ttatgctcct tggcttttct gcaagtgtgt ctacggcgac cattttcccg 120
caatgctcgc aagctcctat agcttccctt cttccccgt accctctacc agcgggtgtct 180
tcggtatgtg aaaacccaat tcttcaaccc tacaggatcc aacaggcaat cacagctggc 240
atcttacctt tatcaccctt ggtcctccaa caatcatcag cctattaca tcagttacct 300
ttggtgcatt tattggcaca aaacatcaag gcacaacaac tacaacaac 349

<210> 588
<211> 430
<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-050-Q1-K1-A11

<400> 588

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acgaggccga cgcgagaggg cagggaacac agccactcgc cgacgagacc ccggcgcgcg 120
cgagagaaag agaagagagg aggatctttt gttcgtgaaa aatattggag gcggaggggaa 180
ggtgaaggag ggggatcgga gatgaacgtg ttccggctgg cgggggacat gacccacctc 240
ctcagcgtgg tagtgctgct cctcaagatc cataccatca agtcctgcgc aggcatatct 300
ctgaagacac aggagctgta tgcacttggt ttgacgacac ggtacctgga cctgtttggt 360
cattttgtgt ctctgtataa cactgtcatg aagctggtct tcttggcaag ttctttctcg 420
atagtttgggt 430

<210> 589

<211> 306

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-050-Q1-K1-A12

<400> 589

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ggttaggctc ctcggtcttt ctgcaagtcc tactacctcg accattttac cgcaatgctc 120
gcaagctact ataactaacc ttcttcccc gtacctctca ccaactgtat cttcagtata 180
tgaaaaccca attcttcaac catacacgat ccaacactca atcgcaactt gcatcttacc 240
tttatcacc tagttcctcc aacaatcatc aatcctatta caacatttac attcgtatca 300
tttatt 306

<210> 590

<211> 362

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-050-Q1-K1-A2

<400> 590

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cctactgagg ctggttggtc tttctgcaag tgctgctacc gcgaccattt tcccgcattg 120
ctcgcaagct cctatagctt cccttcttcc cccgtacctg taaccagcgg tgtcttcggt 180
atgtggaaaa cccaattttt aaaccttcca gaaccaaca ggcatocca gctggcattt 240
aaccttaata accctgggtc ctccaccatt attcaccctt ttaccttaat tacccttagc 300
gcctttaatg gcaccaaaca ttaaggcaca accacctcca caacctgggc tatcaaaact 360
tg 362

<210> 591
<211> 339
<212> DNA
<213> Zea mays
<223> Clone ID: LIB3061-050-Q1-K1-A4

<400> 591
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gcagcagcag cagtcaggcg gtcattggacg cgagcgcagt cggagccggc gggaaggcga 120
agaagggcgc ggtcgggtcg aaggccggcg ggccgaggaa gaagtcggtg actaggtccg 180
tcaaggccgg gctgcagttt cccgtcggtc gcatcgggcg gtacctgaag aagggccggt 240
ccgcgcacgc cgtcggaacg agcgcgcccg tctacctggc cgtcgtcctc aagtacttgg 300
ccgccgaggt gctggagctg gccggcaacg ctgccaaagg 339

<210> 592
<211> 363
<212> DNA
<213> Zea mays
<223> Clone ID: LIB3061-050-Q1-K1-A5

<400> 592
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acgcgccatt tcttcctcct gcctagatct cccctcccc cagcagcaa ggatcgagat 120
gatgacgagc aagaacggat tgaagagaaa aaaaggatca cggaaacggt ctaccccgcc 180
cccccatct atggaaaatc ttctggggaa acccctaggg gcttcactc caaaccttgc 240

ttagccatt cctcttctt caataaagga ccttgatcaa ggtggggaat aagggaagta 300
gcacaccgtc aaccttaatt ttcataatac ccttgaccag gaccaaccat gattcaatta 360
aaa 363

<210> 593
<211> 119
<212> DNA
<213> Zea mays
<223> Clone ID: LIB3061-050-Q1-K1-A6
<400> 593

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gaagggtttt ggatgatgtt tgtggcttcc cagaaataag aaagtacatt tctagattc 119

<210> 594
<211> 113
<212> DNA
<213> Zea mays
<223> Clone ID: LIB3061-050-Q1-K1-A7
<400> 594

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tatggtctcc ttatgctcct tggctcttct tcaagtgctg catactgcga cca 113

<210> 595
<211> 452
<212> DNA
<213> Zea mays
<223> Clone ID: LIB3061-050-Q1-K1-A8
<400> 595

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gatggctgcc cttgctctcc tggcgctcgc tgcgagcgcc gtctacagta caagcggcgg 120
atgtggctgc cagacaccac cgtttcatct accgcctccg ttctatatgc cgctccggtt 180
ctatctgccg tgcgagcagc agtcgcagcc atggcaatac cccactcaac caccgcagct 240
aagcccgtgc cagcagttcg gatcctgcgg cgtcggcagc gtcggcagcc cgttcctggg 300

ccagtgcgtc gagttcctga ggcaccagtg cagcccggca gcgacgccct acggctcgcc 360
acagtgccag gcgctgcaac agcagtgctg tcaccagatc aggcagggtg agccgctgca 420
ccggtaccag gcgacatacg gagtggtcct gc 452

<210> 596
<211> 441
<212> DNA
<213> Zea mays
<223> Clone ID: LIB3061-050-Q1-K1-A9
<400> 596

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caatgctcac aagctcctat agcttacctt cttcccccat acctctcacc agcgggtgtct 180
tcagtatgtg aaaacccaat tcttcaaccc tacaggatcc aacaggcaat cgcagcacgc 240
atcttacctt tatcaccctt gatcctacaa caaccgtcag ccctattaca gcagttacct 300
ttgggtgatt tggtggcaca aaacatcagg gcacaacaac tacaacaact tgtgctagca 360
aaccttgctg actactctca gcaacagcag tttcttacat tcaaccaact ggctgcattg 420
aactctgctg cttatttgca a 441

<210> 597
<211> 319
<212> DNA
<213> Zea mays
<223> Clone ID: LIB3061-050-Q1-K1-B1
<400> 597

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cctgcttatg ctccctgggc tttctgcaag tgctgctacg gcgaccattt tcccgcaatg 120
ctcgcaagct cctatagctt cccttcttac cccgtacctc tcaccagcgg tgtcttccgt 180
atgtgaaaac ccaattcttc aaccctacag gatccaacag gcaatcacag ctggcatctt 240
acctttatca cccttggtcc tacaacaatc atcagcccta ttacatcaat tacctttggg 300
gcatttattg gcacaaaac 319

<210> 598
<211> 429
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB3061-050-Q1-K1-B10

<400> 598

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tateggtcct tgcgcttctt gcgctttttg cgagcgcaac aaatgcgttc attattccac 120
aatgctcact tgctccaagt tccattatta cacagttcct cccaccagtt acttcaatgg 180
gcttcgaaca cccagctgtg caagcctata ggctacaaca agcaattgcg gcgagcgctc 240
tacaacaacc aatttcccag ttgcaacaac aatccttggc acatctaaca atacaaacca 300
tcgcaacgca tcagcaacaa caattcctac cagcactgag ccacctagcc atgggtgaacc 360
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ttgcaaacc 429

<210> 599
<211> 420
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-050-Q1-K1-B11

<400> 599

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aagcgcttgc ggcgagcgtc ttacatcaac caattgcca attacaacaa cgatccttgg 180
cacatctaac catacatacc atcgcaacgc agcagcaaca acaatttcta ccagcactga 240
gccaactagc tgtgggtgaac cctgtcgctt acttgcaaca gcagctgctt gcattcaacc 300
cacttgctct ggcaaacata gttgcatacc aacaactacg acaattgcaa caggtttctac 360
catcgctcag acaactagcc atggagaacc ctgccggcta cctacgacag caacaactga 420

<210> 600
<211> 309

<212> DNA
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 <223> Clone ID: LIB3061-050-Q1-K1-B12
 <400> 600
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 gctcgccagt tactctaagt gtcttagaac acccagcttt acaagcctac attctacaac 120
 aatgcgctac tctgctgatg ctgtcttaca tacaaccata ttgcccatt actacaacat 180
 tccttggcac atctaaccat acataccata tcattctatc agcaacaaca atttctacca 240
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 ttaaacgta 309

<210> 601
 <211> 464
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-049-Q1-K1-H6
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 ccaacaagca atcgagcaa gcaacatacc tttatcacc ttgttggttc aacaatcgcc 180
 agccctatct ttggtgcagt cattggtaca aaccatcagg gcacagcagc tgcagcaact 240
 cgtgctacct gtgatcaacc aagtagctct ggcaaaccct tctccctact ctcagcaaca 300
 acaatttctt ccattcaacc aactgtctac actgaaccct gctgcttatt tgcagcaaca 360
 actattacca ttcagccagc tagctactgc ctactctcag caacaacaac ttcttccatt 420
 taaccaattg gccgcactga acccgctgc ttatttgag cagc 464

<210> 602
 <211> 402
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB3061-045-Q1-K1-H12

<400> 602

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gctcgtgcta gccaccagc cccccgcgc ccacttgca cggcgatggc ttcccggtac 120
tcgctcagct gggccgacgc gccgccctac cactaccacg ggagacccca gccagcgccc 180
gactcaccgc catcctccga cggggccggg ccccgctcgc tctggatcgg cggcctgctg 240
ccatggatgg acgaggacta cctctacggc tgcttcacca cctcgcgcga gcttctttcc 300
cttgtcatca aacggaacaa gcagactggc caatcagagg gctttggctt cctcaaattt 360
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<210> 603

<211> 339

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-045-Q1-K1-H2

<400> 603

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ttccacagtg ctcacttgct cctagtgcc ttattccaca gttcctccca ccagttactt 180
caatgggctt cgaacattca gccgtgcaag cctacaagct acaactagcg cttgcggcga 240
gcgccttaac acaaccaatt gcccaattgc aacaacaatc cttggcacat ctaaccctac 300
aaaccattgc aacgcaacaa caacaacaac aacagtttc 339

<210> 604

<211> 206

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-045-Q1-K1-H3

<400> 604

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caacttgctt tgacaaacc agcagcattc taccaacaac ccatcattgg tggcgccctc 120
ttttagattt cttatgagtt atagttcaat aataaagttt tttgtctgat gtttgggct 180

tcccagaaat aagaaagtac atttct

206

<210> 605

<211> 406

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-045-Q1-K1-H4

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acatgaaaaa gatcgaatgc atccagaggc agaaggaaca ggaactgatg aaaattttaga 120
cctcaagctg actgtatggc tggtagaggag taaccgcctc cgtgaagcat ggaccctctgc 180
atatgttgggt gtttctgaag caatttgttt ggttcatggc tttggcgtct cggcgtctgcg 240
ccaggggatgc acgttttgaa tcaggcgctt tgctggaact tttgggtgca cacaagttga 300
gacaatgctg ctgctgctgt gtgtgtgtgt tttgagatta agacaatgct gctgtgtttt 360
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<210> 606

<211> 416

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-045-Q1-K1-H5

<400> 606

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caacagctgc ttacattcaa ccaactgact gtagtccaac tctgctgcgt acctacaaca 180
gcgacaacag atacttaatc cactagcggg ggctaaccga ttgctcgtct cctttctaca 240
gcagcagcaa ttgctgtcat acaaccagtt gtctttgatg aaccctgcct tggtagaggca 300
gcaccctatc gacggagggt ccactctctc gactacatct gagatgtact cgattgtggc 360
gccctcatag cgtcatgcgt gtcctagact tgctcaatat attgattgag atctat 416

<210> 607

<211> 434

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-045-Q1-K1-H6

<400> 607

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ggaacttcag attggtctga agaattatga tccacagaag gacaagcggt tcagtggctc 180
tgttaagttg ccccatatcc ctctgccaa gatgaagggtg tgcattgctt gtgatgccca 240
gcatgttgag gaggccgaga agatgggact tgactacatg gatgttgagg ctctcaagaa 300
aatgaacaag aacaagaagc ttgttaagag gcttgccaag aagtaccatg ctttcttggc 360
atcagaggcc atcatcaagc agattccccg tctccttgct ctggtctcaa caaggcaggc 420
aagttcccg cctt 434

<210> 608

<211> 442

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-045-Q1-K1-H7

<400> 608

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ctccttgctc tttctgcatg tgttgctaac gcgaccattt ttcctcaata ctcaaacgt 120
cctatagctg ccttcttcc cccatacctt ccatcaatga ccgctttagt atgtgaaaac 180
ccagcccttc aaccctacag gatccagcaa gcaatcgcaa caagcaactt acctttatca 240
cacctgttct ttcaacaatc gccagcccta tctttggtgc agtcattggt acaaacctac 300
agggcagaac agttgcagca actcgtgcta ccagtgatca gccaaagtagc tctggcaaac 360
ctttccccct actctcagca acaacaattt cttccattca accaactgtc tatactgaac 420
cctgctgctt atttgcagca ac 442

<210> 609

<211> 415

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-045-Q1-K1-H9

<400> 609

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ttgcttcctt atgctccttg gtctttctgc aagtgtgtgt accgcaacca ttttcccaca 120
atgctcacia gctcctatag cttcctttct tccccatac ctctcaccag cgggtgtcttc 180
agtatgtgaa aacccaattc ttcaacccta caggatccaa caggcaatcg cagcaggcat 240
cttaccttta tcacccttgt tcttccaaca accgtcagcc ctattacagc agttaccttt 300
ggtgcatttg ttggcacaaa acatcaaggc acaacaacta caacaacttg tgctaggaaa 360
ccttgtgtgc tactctcagc aacagcagtt tcttccattc aaccaactgg ctgca 415

<210> 610

<211> 407

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-046-Q1-K1-A1

<400> 610

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gcagggggcaa tttcttccat ttaaccaatt ggccgcactg aacctctctg cttattttcca 120
gcagcaaata ctactaccat ttggccagct agctacaaca agccccactt cttttttgaa 180
acaacaacaa ttgcttccgt tctaccagca gtttgtgggt aaccccgcaa ccctcttaca 240
actgcaacag ttgctgccct ttgtccaact tgctttgaca aaccagcag cttctacca 300
acaacacatc attggcgggtg ccattcttta gattgttat tagttgtaat tcaataatga 360
agtttttttg ctgatgtatg tggcctccta gaaataagaa gttacat 407

<210> 611

<211> 371

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-046-Q1-K1-A10

<400> 611

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cctccttatg ctccttggtc tttctgcaag tgctgctacg gcgaccattt tcccgcgaatg 120
 ctgcgaagct cctatagctt cccttcttcc cccgtacctc tcaccagcgg tgtcttcggt 180
 atgtgaaaac ccaattcttc aaccctacag gatccaacag gcaatcgcag ctggcatctt 240
 acctttatca cccttggttc tccaacaatc atcagcccta ttacaacagt tacctttggt 300
 gcattttattg gcacaaaaca tcagggcaca acaactacca caacctgggc ctaccaaacc 360
 ttgctgcta c 371

<210> 612
 <211> 436
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-046-Q1-K1-A11

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 cggccgccgc gcagaactgc ggctgccagc caaacgtatg ctgcagcaag tttggctact 180
 gcggcacgac cgacgagtac tgcggcgacg ggtgccagtc gggcccgtgc cgctcgggcg 240
 gcggcggcag cagtggcggc ggtggtgcga acgtggctag cgtcgtcacc ggctccttct 300
 tcaacggcat caagagccag gccgggagcg ggtgcgaggg caagaacttc tacacccgga 360
 gcgcgttctt gagcgccgtc aaggcgtacc caggcttcgc ccatggcggg tcgcaggtgc 420
 agggcaagcg cgagat 436

<210> 613
 <211> 325
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-046-Q1-K1-A12

<400> 613
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 attttgcct ccttgcctc cttgctcttt cagcaagcgc tgctacctcg acttttatct 120
 cacaatgctc acaacaatac ctctctccgg tgacagccgc gggatttcaa taccacaacta 180

tacaatccta catggtacaa gaagccatcc aagcaagcat cttacgggtca ttaacattaa 240
 cccttcaaca accatatgct ctattgcaac agccatcctt agtgcacatctg tatcttcaaa 300
 ggaatcgcg cacaacaact acaac 325

<210> 614
 <211> 385
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB3061-046-Q1-K1-A2
 <400> 614

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 agatattagc cctccttgcg cttcttgccc tttttgtgag cgcaacaaat gcgttcatta 120
 ttccacaatg ctcaattgct cctagtgcc a ttataccaca gttcctccga ccagttactt 180
 caatgggctt cgaacaccta gctgtgcaag cctacaggct acaacaagcg cttgcggcga 240
 gcgtcttaca acaaccaatt aaccaattgc aacaacaatc cttggcacat ctaaccatac 300
 aaaccatcgc aacacaacag caacaacagt tcctaccagc actgagccaa ctagatgtgg 360
 tgaacctgt cgnctacttg caaca 385

<210> 615
 <211> 443
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-046-Q1-K1-A3
 <400> 615

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 attagccctg cttgcgcttc ttgccctttt agtgagcgca acaaatgcgt tcattattcc 120
 acagtgtca cttgtccta gtgccagtat tccacagttc ctgccaccag ttacttcaat 180
 gggcttcgaa catccagccg tgcaagccta caggctacaa ctagcgcttg cggcgagcgc 240
 cttacaacaa ccaattgccc aattgcaaca acaatccttg gcacatctaa ccctacaaac 300
 cattgcaacg caacaacaac aacaacagtt tctgccatca ctgagccacc tagccgtggt 360
 gaaccctgtc acctacttgc aacagcagct gcttgcaccc aaccacttg ctctggcgaa 420

cgtagctgca taccagcaac aac

443

<210> 616
<211> 390
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-046-Q1-K1-A4

<400> 616

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acagaccaac acaaaccaca cctgccccgc gtcgacgcgc caaacacctag cgccgctcgcc 120
tccctctcgg ttctacaccg tctctctccag cctcgccccgc gtgcaccgca gatcagggga 180
cgtagctcgc ccgcgcgcac cgcagatcag gcaacgtacg tcgccccgcgc gagatcgga 240
ttctgtatct ttccttccgt gctcgccggt gctacggcga tggcgggcggc cgaggagcagg 300
cgcgccgggc cgaggagca gccgaagatc ggcagcggca acgtcttcgc cgcgctcgag 360
acgcttaaga agaagaagaa gcccgcgac 390

<210> 617
<211> 449
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-046-Q1-K1-A5

<400> 617

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cgaggggtgt agggaaggag caccagccat ggtgcacgtc aacttctacc gcaactatgg 120
taagacgttc aagaaacaa gccgtcctta tgagaaggag cgtcttgatg ctgaactgaa 180
gctggttggg gagtatgggc tgagggtcaa gcgtgagctt tggaggggtcc agtatgcact 240
gagcaggatc cgtaatgctg caaggcactt gctcaccctt gacgagaaga acccccgtcg 300
tatctttgag ggtgaggcac tttttcgccg catgaaccgc tatgggctgc ttgctgaggg 360
tcagaacaag cttgattatg ttcttgcctt caccgctgag aacttcctcg caaggcgggt 420
tcaaacactt gtcttcaagc tggcatggc 449

<210> 618
<211> 415
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-045-Q1-K1-H11

<400> 618

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tctatgttct tgctatcgcc acaagtgtga ctggactcct ggagaagtca atctttatgc 180
agagcgccaa aatgattgag cgcttctcca cagaagccat gtttatgaac tccctgggaa 240
tgctgctggg gttgttgagc agccttgta ttcttgcaact cgtagtcct ggacccagca 300
tgatcgacac atacagaggc tcttctgagt gagaggaaat gattacagcc tagtttctta 360
agctacattt ttaatcagta gctgagcaat ttttgtgtac atgtacccag aatta 415

<210> 619
<211> 328
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-045-Q1-K1-F6

<400> 619

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aaagaaaaag tgatgcagta tcattgtgtt gttttttgtt ctgttcgtca tcatacacta 180
agcttctgtg aaaaagaaaa agtcttggac gttgttgta tgttgccatt gtgccatttt 240
tcatgtataa gaacttacta agaatcttcc aaaaaaaac aacaaataca acaacttatg 300
ctaagaaaaa atactagact aataaaaa 328

<210> 620
<211> 429
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-045-Q1-K1-F7

<400> 620

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 caaggagctc gacggccgta acatcacctg taaccaggcc cagtcccgtg gcgggtggcgg 180
 tggcggcggtt ggctacggcg gcggtcgcgg cggcggcggc tatgggtggcg ggcgccgtga 240
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 cggaggcggtt ggcggttacg gcggtcggcg cgagggtggtt ggtggcggct acggcggcgg 360
 cggcggcggc tggagggact gatgtgtggg cccatcctgg cttcggccga gttatcttat 420
 ctatctata 429

<210> 621
 <211> 262
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-045-Q1-K1-F8

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 ctgctgggta tttacaggca ccaccaatta caaccattca gccagctagc tactgcctac 180
 tctcagcaac aacaacttct tccatttaac caattgcccg cactgaaccc cgctgcttat 240
 ttgcagcaga aaatactact gc 262

<210> 622
 <211> 353
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-045-Q1-K1-F9

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 gagccctgct gccttcttac tgcagcaaca gttgcttcca ttccatttac aagttgtggc 180
 aaacattgct gctttcttgc aacaacaaca acaattgctg ccattttacc cacaggttgt 240

gggaaacatt aacgccttct tgcaacagca acagttgcta ccattctacc cacaggatgt 300

ggcaaacaat gtcgccttct tacaacaaca acaattgctg ccatttaacc aac 353

<210> 623

<211> 413

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB3061-045-Q1-K1-G1

<400> 623

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gccctgggtg gtcgtcgaag ggcagcccct gctagaggat tacgagaatt tcgaggctta 180

catctgcaag gcttacaagg gcactccacc gaaggcctgt gagggcctgg aacgtctgca 240

gatggccctc gagacagcgg cggaggcgcg caacggcgctc agctacaact ccggtgtcag 300

caagcttgcg actgctgaag atganggtgg ggagcataag gtgggagaat actagtacgt 360

aattgactag cgacgtgccc ttttttgggt catgtgaaga tatgaaagac ccg 413

<210> 624

<211> 418

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-045-Q1-K1-G11

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gccccggcct cagcctcatc cccagccaca cccatgcccg tgccaacagc cgcattcaag 180

cccgtgccag ctgcagggaa cctgcggcgt tggcagcacc ccgattcctg gccagtgcgt 240

cgagttcctg aggcattcagt gcagcccagc ggcgacgccc tactgctcgc ctacttgcca 300

gtcgttgccg cagcagtgtt gccagcagct caggcaagtg gagccgcagc accggtacca 360

ggcgatcttc ggcttgggtc ttcagtcctc cctgcagcag cagccgcaaa gcggccag 418

<210> 625
 <211> 415
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-045-Q1-K1-G12

<400> 625

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 cgaacaccca gctgtgcaag cctataggct acaacaagcg cttgcggcga gcgtcttaga 120
 acaaccaatt gcccaattac aacaacaatc cttggcacat ctaaccatac aaaccatcgc 180
 aacgcagcag caacaagcac tgagccacct agccgtgggtg aaccctatcg cctacttgca 240
 acaacagctg cttgcatcca acccacttgc tttggcaaac gtagctgcat accaacaaca 300
 acaacagttg caacagtttc taccagcgcg cagtcaacta gccatgggtga accctatcgc 360
 ctacctataa cagcaacaac ttctttcatc tagcccgctc gctatgggca atgca 415

<210> 626
 <211> 270
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-045-Q1-K1-G2

<400> 626

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 ctctgctgct tatttacagc agcaacaact actaccattc agccagctag ctgatgtgag 180
 ccctgctgcc ttcttgacac aacaacagtt gttgccgttc tacctgcacg ctatgcctaa 240
 cgctggcacc ctcttacaac tgcaacaatt 270

<210> 627
 <211> 446
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-045-Q1-K1-G3

<400> 627

gagaccaact agcaacatag aaagcacaat agtgtacca caatggcagc caaaatattt 60
tgcttgctta tgctccttgg tctttctgca agtgttgcta cgcgaaccat tttcccacaa 120
tgctcacaag ctectatagc ttccttctt ccccatacc tctcaccagc ggtgtcttca 180
atgtgtgaaa cccaattgt tcaaccctac aggatccaac aggcaatcgc aacaggcatc 240
ttaccattat cacccttggt cctccaacaa ccgtcagccc tattacagca gttacctttg 300
gtccatttgg tggcacaaaa catcagggca caacaactac aacaacttgt gctagcaaac 360
cttgctgcat actctcagca acatcagttt cttccattca accaactggc tgcattgaac 420
tctgctgctt atttgcaaca acaatt 446

<210> 628
<211> 353
<212> DNA
<213> Zea mays
<223> Clone ID: LIB3061-045-Q1-K1-G4
<400> 628

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cctccttgcg cttcttgccc tttttgtgag cgcaacaaat gcgttcatta ttccacaatg 120
ctcacttgct cctagtgcga ttattccaca gttcctccca ccagttactt caatgggctt 180
cgaacaccta gctgtgcaag ccaacatgca acaacaagcg cttgcggcga gcgtcttaca 240
acaaccaatt gcccaattgc aacaacaatc cttgccacat ctaacaatac aagccatcac 300
aacgcaacag caacaacagt tctaccagc actgagccac ctagccatgg tga 353

<210> 629
<211> 455
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB3061-045-Q1-K1-G5
<400> 629

cagcaagcaa catagaaagt agaatccatt agcaacaata gagcaacaat ggcgaccaag 60
atattttccc tccgtatgct cttgctctt tctacatgtg ttgctaacgc gacaattttc 120
cctcaatgct cacaagctcc tatagcttcc cttcttcccc cataccttcc atcaattata 180

gcttcagtat gtgaaaaccc agctcttcaa ccatataggc ttcaacaagc aatcgagca 240
agcaacatac ctttategcc cttgttggtt caacaatcac cagccctatc tttggtgcag 300
tcattggtac aaaccatcag ggcacaacag ctgcagcaac ttgtgctacc tgggatcaac 360
ccagtaacte ttgccaaacc tttctcccta ctctcagcac caacaattnc ttccattcaa 420
ccaactgtct acactggacc ctgctgctta tttgc 455

<210> 630
<211> 438
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-045-Q1-K1-G7

<400> 630

gaaaaccag ctcttcaacc atataggctt caacaagcaa tcgcagcaag caacatacct 60
ttategccct tggtgtttca acaatcacca gccctatctt tggtgcagtc attggtacaa 120
accatcaggg cacaacagct gcagcaactc gtgctacctg tgatcaacca agtagctctg 180
gcaaaccctt ctccctactc tcagcaacaa caatttcttc cattcaacca actgtctaca 240
ctgaaccctg ctgcttattt gcagcaacaa ctattaccat ttagccagct agctactgcc 300
tactctcagc aacaacaact tcttccattt aaccaattgg ccgcaactgaa ccccgctgct 360
tatttgcagc agcaaatact actgccattt agcgagctaa ctgcaacaag tcgtgctttc 420
ctcttgacac agcaacag 438

<210> 631
<211> 236
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-045-Q1-K1-G8

<400> 631

cccacgcgtc cggttcttct tgctgtgcac tacacaaacc aaccataact tctcttggtc 60
tcgttctctt ccctgcgtga accgcggacc aagaagaagc gggcggtggg gactttggga 120
tttgaaagcc tacatattat tatttctcta attcaggagt ggtctgtgct gggaggggag 180
ggatctgtgg ggctgcagcc ccatccgggc tgagggttga aagatccggc cctttg 236

<210> 632
 <211> 413
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-045-Q1-K1-G9

<400> 632

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 ccttatgctc cttgggcttg ctgcaagtgc tcgtacagtg accattctcc cgcaatgctc 120
 gcaagctect atagctctcc ttcttaccct gtacctatca ccaacagtgt ctgcgatatg 180
 tgaaaaccca attcttcaac cctacaacat ccaacaagca attgcaactt gcatcttaac 240
 cttaataacc ttgggtcttc aacaataatc aagcctaata caacaagtac ctttagttca 300
 attaatggca ccaaaccacc agggcccacc aactacaaca cctgttctta gcaaaccctg 360
 ctgctactc taagaaccac aactttcttc cattcaacca cttegggtcaa ttg 413

<210> 633
 <211> 414
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB3061-045-Q1-K1-H1

<400> 633

gcttctgcac gccgtcggtc accaatcgtc gcctactacg actcggcctt caagcgggag 60
 cttcatgcgc gacgtccgcg tcgccgtctt gcgccacgac ctcacccgag cgctctgcct 120
 actccgaag cctcctccg cggcgccgc cccagcagtt cctcctccgc agcgcgccgc 180
 ccatcagttc ctctccgcg gtgcccgcg acccgccgag caccagcagc agcgtcgccg 240
 gtggttgagc tccaccgcct ttgccgcgct ccatctcttc cggaagtgcc ctgctccacc 300
 gnccacctgt acggcagcct gaccagcta ttgggtgcc tgctcggag atctcgtgc 360
 ctgcgcgacc tgaaatttgt gtatgttcta cctgtatagg agggttcacc ttct 414

<210> 634
 <211> 411
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-045-Q1-K1-H10

<400> 634

gcaacataga aagtggaatc cagtagcaac aacagagcaa caatggcgac caagataggt 60
tccctcctta tgctccttgc tctttctgca tgtgttgcta acgcgacaat tttccctcaa 120
tgctcacaag ctctatagc ttcccttctt ccccatacc ttccatcaat gatagcttca 180
gtatgtgaaa acccagctct tcagccctat aggctccaac aagcaatcgc agcaagcaac 240
atacctttat cacccttggt gtttcaacaa tcgccagccc tatctttggt gcagtcattg 300
gtacaaacca tcagggcaca gcagctgcag caactcgtgc tacctgtgat caaccaagta 360
gctctggcaa acctttctcc ctactctcag caacaacaat ttcttccatt c 411

<210> 635

<211> 412

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-045-Q1-K1-E12

<400> 635

gcaacataga aagtggaatc cagtagcaac aatagagcaa caatggcgac caagatacgt 60
ttccctcctt atgctccttg ctctttctgc atgtgttgct aacgcgacaa ttttccctca 120
atgctcacia gctcctatag ctcccttctt tccccatcac cttccatcaa tgatagcttc 180
agtatgtgaa aaccagctc ttcaacccta taggctccaa caagcaatcg cagcaagcaa 240
cataccttta tcacccttgt ttcaacaatc gccagcccta tctttggtgc agtcattggt 300
acaaaccatc aaggcacagc agctgcagca actcgtgcta cctgtgatca accaagtagc 360
tctggcaaac ctttctccct actatcagca acaacaattt cttccattca ac 412

<210> 636

<211> 327

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB3061-045-Q1-K1-E2

<400> 636

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ggacggcgag atggccgacg gggaggacgc cgtcgtcgcg cgccgtcggg ccgtcatcac 120
agactaccgc aagaagctgc tcaactgcag ggagctagag tcgcgcgtcg gcaccgtgag 180
agaaagcctt aaaactgcaa agaaggattt taccaagact gaggacgact taaagtctct 240
gcagagtgtg gggcaaataa ttggagaagt actccgacct cttgataatg aacgctntat 300
cgtgaaggcc agcagtggtc cccgata 327

<210> 637
<211> 428
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-045-Q1-K1-E5

<400> 637
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ttgtactact gcatgacttt cctgaatttc tttgtgatta tcaacttcagt ttctgcgatg 120
tgattccttc aagttgcatt caaatgcgca atgtcattct tagtgctttt ccacgtaaca 180
tgagactgcc agacccttct acccctaata taaagattga tttgttggct gaaatttcaa 240
tagcaccacg aatcatgtcg gatgttgatg gtgcccttaa atcaaagcag ttgaagactg 300
aggttgatga atatctcaag aggccggaag gctcttcctt tttaagtgac ctgaacccaa 360
aattgctgct gctcagaat gaagcaagtg ttgctgggac acgctacaac gtgcctctga 420
tcaattca 428

<210> 638
<211> 416
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-045-Q1-K1-E6

<400> 638
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ttttgcttcc ttatgctcct tggctcttct gcaagtgttg ctaccgcaac cattttccca 120
caatgctcac aagctcctat agcttccctt cttcccccat acctctcacc agcgggtgtct 180

tcaatgtgtg aaacccaat tgttcaaccc tacaggatcc aacaggcaat cgcaacaggc 240
atcttaccat tatcaccctt gttcctccaa caaccgtcag ccctattaca gcagttacct 300
ttgggtcccat ttgggtggcac aaaacatcag ggcacaacaa ctacaacaac ttgtgctagc 360
aaaccttgct gcatactctc agcaacatca gtttcttcca ttcaaccaac tggctg 416

<210> 639
<211> 425
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-045-Q1-K1-E7

<400> 639

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tgctgctggt ggcttaacac ctggctctgc tggaggatta gaagggtccag accggatctt 120
tgtaggtggt ctaccatatt atttactga ggctcaagtgc cgggagttgc tcgagtcctt 180
cggacctctg cgtggattcg atcttgtgaa ggatagagaa actggtaact cgaagggata 240
tgccttctgt gtttaccagg atcttaatgt cactgacatt gcctgtgctg cccttaatgg 300
catcaagatg ggggacaaga ctcttactgt taggagggca aaccaaggag cttctcagcc 360
taggccagag caagaaagca tctgtctgca ggcacagcag caggtgcaaa tgcagaaact 420
cgtat 425

<210> 640
<211> 448
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-045-Q1-K1-E8

<400> 640

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ccttatgctc cttggtcttt ctgcaagtgc tgctaccgca accattttcc cacaatgctc 120
acaagctcct atagcttcct ttcttcccc atacctetca ccagcgggtgt cttcagtatg 180
tgaaaaccca attcttcaac cctacaggat ccaacaggca atcgcagcag gcattcttacc 240
tttatcacc ttgttctctc aacaaccgtc agccctatta cagcagttac ctttgggtgca 300

tttgttgga caaaacatca aggcacaaca actaccacaa cttgtgctag gaaaccttgc 360
 tgcctactct cagccacagc agtttcttcc attcaaccaa ctggctgcat tgaactctgc 420
 tgcttatttg caacaacaac taccattc 448

<210> 641
 <211> 431
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB3061-045-Q1-K1-F1
 <400> 641

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 gtcgaagaag ccgaggaatg ccagccccag actcgcgccc gtatcaccaa aggagaagaa 120
 ggacaagatc ggcgagaggg tcgcagcgt ccagcagctc gtgtcaccgt tcggaaagac 180
 cgacacggct tctgtcctgc aggaggcgtc ggggtacatc aagttcctgc accagcagct 240
 ggaggtcctg agtccccctt acatgcgcgc tcctccggcc gctggcgctg cgctgagga 300
 cccccagcgc tacagcctnc ggagccgcgc gctgtgcctg gtgccggtgg acctgacgct 360
 gcagctgacc cagagcaacg gggcccgacc tgtgggcgcc ggcgcacacg gncaggcgaa 420
 agtgaggact g 431

<210> 642
 <211> 411
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-045-Q1-K1-F10
 <400> 642

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 acttctgtga ccgcccgcgc ccaaaccctc gccgccctcc cgtgccactg tggacggcg 120
 cagtcacg gtgcctctc ggctgcgct ctcttctctt tcctcgcccc tccttctctg 180
 gccgtccgt ccgtcgacc cgacgtggtg ctccagcgag tgcacccgct gaggccggac 240
 tggatgagg agttctatgc ctcgccatg gaccagggaa tgaaatcata cgaagcagag 300

atcgcaggat acaaagtaaa gctcttctct caactgtcgc ctgcgggaaa gaacattctc 360
gagctcgggtg ttgggacaag gcctaacttc aaatactatg caagtgaaga t 411

<210> 643
<211> 416
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-045-Q1-K1-F11

<400> 643

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ttttgcttcc ttatgtctct tggcttttct gcaagtgttg ctaccgcaac cattttccca 120
caatgctcac aagctcctat agcttccctt cttcccccat acctctcacc agcgggtgtct 180
tcaatgtgtg aaaaccgaat tgttcaacct tacaggatcc aacaggcaat cgcaacaggc 240
atcttaccat tatcacctt gttcctccaa caaccgtcag ccttattaca gcagttacct 300
ttgggtccatt tgggtggcaca aaacatcagg gcacaacaac tacaacaact tgtgctagca 360
aaccttgctg catactctca gcaacatcag tttcttccat tcaaccaact ggctgc 416

<210> 644
<211> 407
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-045-Q1-K1-F12

<400> 644

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cttaaccgcc atattcatcg tacatacctt gaaggcggga tcaactttgc tgatggatct 120
gtacagggtat tagcggctac acaaatgcct gaagagccag ctggatgggt ccagggtaca 180
gcagactcta tcagaaaatt tatctgggta ctcgaggatt attacagtca caaatccatt 240
gacaacattg taatcttgag tggcgatcag ctttatcgga tgaattacat ggaacttggt 300
cagaaacatg tcgaggacga tgctgatatc actatatcat gtgctcctgt tgatgagagc 360
cgagcttcta aaaatgggct agtgaagatt gatcatactg gacgtgt 407

<210> 645

<211> 325
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3061-045-Q1-K1-F2

 <400> 645

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 gcaggggaacc tgcggggttg gcagcacccc gatcctgggc cagtgcgtcg agttcctgag 120
 gcatcagtgc agcccgacgg cgacgcccta ctgctcgctt cagtgccagt cgttgcggca 180
 gcagtgttgc cagcagctca ggcaggtgga gccgcagcac cgttaccagg cgatcttcgg 240
 cttggtcctt cagtccattc tgcagcagca gccgcaaagc ggtcagggtc cggggctggt 300
 ggcgggcgcaa atagcgcagc aactg 325

<210> 646
 <211> 369
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB3061-045-Q1-K1-F3

 <400> 646

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 agaagagatg gctaagatcg ccgcagccgc cgcgggcggc gcgggcgctgt gcttcgcggc 120
 cctgggtggcc gtggccgtct gccaaaggca ggtcgagcgg cagaggctca gggacctgca 180
 gtgctggcag gaggtccagg agagcccgtt cgacgcgtgc cgccagggtc tcgaccggca 240
 gctaaccggc ggcgggcgtc gcggcccgtt ccggtggggc accgggctcc ggatgcgggt 300
 ctgccagcag ctccaggacg tgagccgcga gtgccgctgc gccgncatcc ggagcatggt 360
 caggggcta 369

<210> 647
 <211> 368
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3061-045-Q1-K1-E11

 <400> 647

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 aacaatggcg acagcgagtg agatcgcggc ggtgggcgta ataggcgcg ggcagatggg 120
 ctcgggcatc gccagctcg ccgccggcgg cggtgtgcc gtactttctcc tcgacgccga 180
 cccactgcc ctctcccggtg ccgtcgtctc catctccggc tccctacggc gcctcgccgc 240
 caaaggccag ctctcccaag ccgcgtgcga agactcaata aagcggataa ggtgcgtctt 300
 cggcgtgcag gatctcaagg acgccgatct tgtgatcgaa ggcgtcgtgg agaacgaaga 360
 catcaaga 368

<210> 648
 <211> 421
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-050-Q1-K1-H11
 <400> 648

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 ggctgggtgt agcaaaccctt gctgcctact ctgagcaaca gcagtttctt ccattcaacc 120
 aactagctgc attgaactct gtttcttatt tgcaacaaca acaactacca ttcagccagc 180
 tacctgctgc ctacccccaa caatttcttt cattcaacca actggcagca ttgaactctc 240
 ctgcttattt acaacaacaa caactactaa cattcaacca actagcttgt gttaaccctt 300
 cttacttctt tatacaacca caattgggtgc ctttctaaca acaaccttgg cctaacgctt 360
 gcaacctttt aacacttcaa ccattgcttg cattcaaccc aattgctttg accaaaccaa 420
 c 421

<210> 649
 <211> 439
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-050-Q1-K1-H12
 <400> 649

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 gctcgttggg atttctgcaa gtgctgctac ggcgaccatt ttcccgcaat gtcacaagc 120

tcctatagct tcccttcttc ccccgtaacct ctcaccagcg gtgtcttcgg tatgtgaaaa 180
 cccaattctt caaccctaca ggatccaaca ggcaatcgca gctggcatct tacctttatc 240
 acccttggtc ctccaacaat catcagccct attacagcag ttacctttgg tgcattttatt 300
 ggcacaaaac atcaaggcac aacaactaca acaacttggt ctagcaaacc ttgctgacct 360
 ctctcagcaa cagcagtttc ttccattcaa ccaactagct gcattgaact ctgctttctta 420
 tttgcaacaa caacaacta 439

<210> 650
 <211> 419
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-050-Q1-K1-H2
 <400> 650

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 gaactgtaag atggcatcag cagagctttc ccgtgaggaa aatgtgtaca tggcgaagct 120
 cgccgagcag gcagagaggt acgaggaaat ggttgagttc atggagaagg tagcgaaaac 180
 tgttgactcg gaggagctca ctgtggagga gcgcaacctc ctgtctgttg catacaagaa 240
 cgtcattgga gcccgccgtg cctcatggcg catcatctcc tccatcgagc agaaggagga 300
 gggtcgaggc aatgaggacc gtgtaacact catcaaaggac taccgtggca agaataaaac 360
 tgagctcacc aagatctgtg atggcatcct caagctttct gaatctcacc ttgtgccgt 419

<210> 651
 <211> 489
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB3061-050-Q1-K1-H4
 <400> 651

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 atgtcgacga cggtagccgc tgcgtccgtc gaccagaagc tcgccctcgc caagcgttgc 120
 tcccagagag cgaccctcgc cggagccaag gcggcagcgg tggcgactat cgccctccgc 180

atccccaccc tggccagcgt gcggatgctg ccatggggcca aggccaacat caacccccacc 240
ggccaggcgc tcatcgtctc cacgggtggct gggatggcct acttcatcgc cgccgacaag 300
aagatcctgt cgctggcgag gcgccactcg ttccagcaag cccctgagca cctcaagaac 360
acctncttcc agggcaccgg ccgtcccccac ccagccttct tcaggccgtg agacgagacc 420
ttcgtccaga gctagctacc tacctctttt tccagtttgc caatgcaagc accaaatgcc 480
caccgatgc 489

<210> 652
<211> 452
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-050-Q1-K1-H5

<400> 652
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gcctgcttat gctccttggc ctttctgcaa gtgctgtac ggcgaccatt ttcccgaat 120
gctcgcaagc tcctatagct tcccttcttc ccccgtaact ctcaccagcg gtgtcttcgg 180
tatgtgaaaa cccaattctt caaccctaca ggatccaaca ggcaatcgca gctggcatct 240
tacctttatc acccttggtc ctccaacaat catcagccct attacaacag ttacctttgg 300
tgcatttatt ggcacaaaac atcagggcac aacaactaca acaacttggt ctagcaaacc 360
ttgctgccta ctctcagcaa cagcagtttc ttccattcaa ccaactaagt tcattgaact 420
ctgcttctta tttgcaacaa caacaactac ca 452

<210> 653
<211> 336
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-050-Q1-K1-H6

<400> 653
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tcgtgctcat gctgcgcctg gctctggcaa ctgccagtac ctctaccatg cagatgcctt 120
gccctgcgc tgctctagca tggcttgac ggcgtgact cctgactgac gacgatgatg 180

ggcgccaaca gcctgtaccc ctacgctgag tacctgaagc agccgtagtg catcccgatt 240
 cacgcttgat cactactact cctgcagcag tcatccgagc tccatgttcc agtcgctccg 300
 gcaacagtgc tgccagcagc cgatgaggat gatcga 336

<210> 654
 <211> 459
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-050-Q1-K1-H7

<400> 654

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 caaggatcta tactattgca atggccaaaa gctccccctt gcagctgctc aaattggggca 120
 agctttttaga aatgagatct cgccacgaca aggtcttctc cgagtgcgtg aattcacatt 180
 ggcagagatt gagcattttg tggacccaaa agacaaaatca catccaaaat ttgttgatgt 240
 tgctgatttg gagttcctga tgtttccaag agagctacaa ctctcaaggg agtcggccaa 300
 actattgaag ctcggggaag cagttgcaaa gggaactgtt aataacgaga cacttggtta 360
 cttcattgga aggggtctatc ttttctgac atgcttggga attgataagg gtcggttgcg 420
 cttcaagcag catttaccta atgagatggc tcattatgc 459

<210> 655
 <211> 242
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-050-Q1-K1-H8

<400> 655

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 ttaggtacac acgcaagcaa ttagttcatg cgcttattag gttgtgccac tggccaccac 120
 tacactacat tacactagca caagcaagca gctacacata cttgtccata tcacataaac 180
 gaaacagcat atataagaag atgtcccaac atctttgcac cacgcgcgag atcaggggcc 240
 ct 242

<210> 656

<211> 128
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3061-050-Q1-K1-H9

 <400> 656

 caacaaccca tcattggtgg tgccctcttt tagattgctt atgagttata cttcaataat 60
 gaagcttttt ggatgatgtt tgtggctttc cagaaataag aaagtacatt tgtaaaaaaa 120
 tacaatac 128

<210> 657
 <211> 445
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3061-051-Q1-K1-A1

 <400> 657

 atggagacca actagcaaca tagaaagcac aatagtgtac caacaatggc agccaaagta 60
 tgggtgectcc ttatgtcctt tgggtctttct gcaagtgtctg ctacggcgac cattttcccg 120
 caatgctcgc aagctcctat agcttccctt cttccccgt acctctcacc agcgggtgtct 180
 tcgggtatgtg aaaacccaat tcttcaaccc tacaggatcc aacaggcaat cacagctggc 240
 atcttacctt tatcaccctt gttcctccaa caatcatcag ccctattaca tcagttacct 300
 ttgggtgcatt tattggcaca aaacatcagg gcacaacaac tacaacaact tgtgctagca 360
 aaccttgctg cctactctca gcaacagcag tttcttccat tcacccaact aactgcattg 420
 aactctgctt cttatttgca acaac 445

<210> 658
 <211> 427
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB3061-051-Q1-K1-A10

 <400> 658

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 cttggctctt ctgcaagtgc tgctacggcg agcattttcc cgcaatgtc acaagctcct 120

atagcttccc ttcttcccc atacctctca ccagcgatgt cttcagtatg tgaaaaatcca 180
 attctttctac cctacaggat ccaacaggca atcgcagcag gcatcttacc tttatcaccc 240
 ttgttctctc aacaatcatc agccctatta cagcagttac ctttggtgca tttattggca 300
 caaaacatca gggcacaaca actacaacaa ctctgtgctag caaaccttgc tgcctactct 360
 cagcaacagc agttaccttt ggtgcatttg ttggcacana acatcagggc acaacaacta 420
 caacaac 427

<210> 659
 <211> 366
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-051-Q1-K1-A11

<400> 659
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 agtgatgaag aagtatcgac acctcaagct gccagacatg ctgctgaggc cgactaagac 120
 tgagtcggcg gaagccaaga ctgagtcgac tcacagcagt tgaagatgct tccgacatga 180
 tctaaactag ttgaattggc atgttaatta tgctgaatcg acggacaaaac ttctaccttg 240
 tgccactggc ctatcccagt gacttgcctt aaaatcaaca ttgtgtcttt acatgcacat 300
 cctaggggtg ccctgatcac attattgata ttgtccctga gatgcttatt tagatctaca 360
 attatg 366

<210> 660
 <211> 453
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB3061-051-Q1-K1-A2

<400> 660
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 tgcttatgct ccttggctct tctgcaagtg ttgctaccgc aaccattttc ccacaatgct 120
 cacaagctcc tatagcttcc cttcttcccc catacctctc accagcgggtg tcttcaatgt 180

gtgaaacccc aattgttcaa ccctacagga tccaacaggc aatcgcaaca ggcatcttac 240
cattatcacc cttgttcctc caacaaccgt cagccctatt acagcagtta cctttgggtcc 300
atttgggtggc acaaaacatc agggcacaac aactacaaca acttgtgcta gcaaacccttg 360
ctgcatactc tcagcaacat cangttcttc catccaccca acttgctgca ttgaactctg 420
ctgcttattt gcaacaacaa ttaccattca gcc 453

<210> 661
<211> 418
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-051-Q1-K1-A3

<400> 661

cccacgcgtc cgatcgccct cgttatttac atcgctgcca ccctcctctc cgccgtggcc 60
ggcgccgccc gggatggggg gagcgcaatt ccccggcgac aacgacgtcg cggaagtaga 120
cgcgggcccg gacggagagg tggaccgccc tgacgtgggc aagatgaagc acgggtgcga 180
gcattaccgg cggagggtgca agatcgtggc accgtgctgc aaccagggtg tccccctgccg 240
ccactgccac aacgaggcta cggcttccgg agatcggcat acaatatgtc gtcaggatgt 300
tgaaaaagta gtttgcttac tctgtgaaac aaaacagccg gtgtcacaag tgtgcataag 360
ctgtggagtc aatatgggag agtacttttg tgatatatgc aaaattttat gatgatga 418

<210> 662
<211> 440
<212> DNA
<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB3061-051-Q1-K1-A5

<400> 662

cggatggacc cggtgttact ttaatatcag cgaaatgggt ttttctgcgt acctttgtta 60
tatggctatg tatctcattt ttgtggagtt tggaatttac tggatgcaca gagagttgca 120
tgacataaag ccactataca aacatctgca tgcgaccac catatttaca acaaggagaa 180
caccttgtct ccgtttgctg gactcgcgtt tcacccactg gatgggtattc tgcaagcgat 240
accgcatgtg cttgcgctct tcctcctccc aacgcacttc aggacgcaca tcgctctcgt 300

gttcttggag ggcgtgtgga cgacaaacat ccacgactgc attcacggca aggtatggcc 360
 agtcatgggc gctgggtatc acaccatcca ccatacgact taccgncaca actatggcca 420
 ctacaccgtc tggatggact 440

<210> 663
 <211> 424
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-050-Q1-K1-H10
 <400> 663

cccacgcgtc cgcccacgcg tccgattggc acaaaacatc agggcacaac aactacaaca 60
 actggtgcta gcaaacccttg ctgcctactc tcagcaacag cagtttcttc cattcaacca 120
 actagctgca ttgaactctg cttcttattt gcaacaacaa caactaccat tcagccagct 180
 acctgctgcc tacccccagc aatttcttcc attcaaccaa ctggcagcat tgaactctcc 240
 tgcttattta cagcagcaac aactactacc attcagccag ctagctggtg tgagccctgc 300
 taccttcttg atacaaccac agttgttgcc gttctaccag cacgctgcgc ctaacgctgg 360
 caccctctta caactgcaac aaattgctgc cattcaacca acttgctttg acaaaccag 420
 cagc 424

<210> 664
 <211> 454
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-050-Q1-K1-F7
 <400> 664

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 cctcctcgtg ctggttgtag tttcaccacg tgctgctact gctaccattc tcccgcaatg 120
 atcgcaagct tctatagctt acattcttca ccagtacctc tcaccagagg tgtattccct 180
 atgtgaaaac ccaactcttt aaccctacag gatccaacac gcaatcacag ctgacatctt 240
 acctttatca cactagcttc tccaacaatt ataaaacctt ttacatcaca tacctttgct 300
 gcatttattg gcacaaaaca tcaggtcaca acaactacaa caacttgtgc taacaaacct 360

tactgtctac tctcaataac aataaattat ttcattcaac caaataactt aattttaactc 420
tactttcttat ttcaacaaca acacctacca ttca 454

<210> 665
<211> 364
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-050-Q1-K1-F8

<400> 665

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cagggcgctc cgtgctctcc tccgcgctgt ccgcggaccg cgggtcccctg cagccctgt 120
ctgtcgtccg cccccagccc cctgctccgc tgcgggctgc ggcgctgcct gctccctggc 180
tctcagcctg ccgctttctca gtccacttct gccgcagccc ctcttctctc ggtctagaga 240
tccgtccggg cgcggcaagc tcgctttcgt ttgcattca gtgaacgcat tggctatata 300
aaccctgggg gcataactct agtagaaaaa gggaaagaag ccaggatcta aggcaagggt 360
tttc 364

<210> 666
<211> 391
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-050-Q1-K1-F9

<400> 666

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gcgggggctg cggcggcggc tccaagacgt cgtggcctga ggtggtcggg ctgagcgtgg 120
aggacgcaa gaagtgatc ctcaaggaca agccggacgc cgacatcgtg gtgctgccc 180
tcggctccgt ggtgaccgcg gattatcgcc ctaaccgtgt cccgatcttc gtgcacatcg 240
tcggccaaac gcccacatc ggctgataat atataagcta gccgctatct tcttttcttg 300
gcccaaaact tggaataaat atatatacga tgaaataacg ccggcatgcc gaataatgga 360
tgtgtgaatt ctactaatt aagtaatgca t 391

<210> 667
 <211> 451
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-050-Q1-K1-G1

<400> 667

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 ccttgtgctg cttggctctt ctgcaagtgc tgctacggcg accattttcc cgcaatgctc 120
 gcaagctcct atagcttccc ttcttcccc gtacctctca ccagcgggtgt cttcgggtatg 180
 tgaaaaccca attcttcaac cctacaggat ccaacaggca atcacagctg gcatcttacc 240
 tttatcacc ttgttctctc aacaatcatc agccctatta catcagttac ctttgggtgca 300
 tttattggca caaaacatca gggcacaaca actacaacaa cttgtgctag caaaccttgc 360
 tgctactct cagcaacagc agtttcttcc attcaaccaa ctagctgcat tgaactctgc 420
 ttcttatttg caacaacaac aactaccatt c 451

<210> 668
 <211> 435
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-050-Q1-K1-G10

<400> 668

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 cactggatca tcgacatgga cgcgagctg atcaccatcg agaactcgcg gtccgacgag 120
 aagctgctct ccgtgttccg tgagggtgtc aagtacggcg cgggcatcgg ccccggtgtc 180
 tacgacatcc actccccag gatcccgctg gccgaggaga tcgccgaccg catcgacaag 240
 atgctggccg tgctggacac caacatctc tgggtgaacc ccgactgcgg cctcaagacc 300
 cgcaagtaca cggagggtcaa gcccgccctg accaacaatgg tctccgctgc taagctcatt 360
 cgcaccagc tcgccagcgc caagtgaagc cctttttttg cctttttcgt ttccgaggaa 420
 ggcgtcgtcg atgcc 435

<210> 669
 <211> 405

<212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-050-Q1-K1-G11
 <400> 669
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 tgctgatcgt tgccattgct ctctgtggcg tcgctgctag cgccgactcc agtacaagcg 120
 gcggctgctg ctgccagaca ccagcgtgtc atctaccgcc ttagtctctat atgccgactc 180
 cgttctatct gccgacgcag cagcatccgc agccatggca ttaccacact catccaccgc 240
 agctaataccc gtgccagcag ttccggatcct gcggcgctcg cagcgtatgc agtccgctcc 300
 tgggccagcg cgtcgagatg ctgaggcacc atgtgcagac cggcggctac tccgtacagc 360
 tcgacacagt gccaggcgct gcagcagcaa tgctgacacc agatc 405

<210> 670
 <211> 437
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-050-Q1-K1-G12
 <400> 670
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 ttctgcaagt gctgctaccg caaccatttt cccacaatgc tcacaagctc ctatagcttc 120
 ctttcttccc ccatacctct caccagcggg gtcttcagta tgtgaaaacc caattcttca 180
 accctacagg atccaacagg caatcgcagc aggcatctta cctttatcac ccttggttct 240
 acaacaaccg tcagccctat tacagcagtt acctttgggtg catgtgttgg cacaaaacat 300
 caaggcacia caactacaac aacttgtgct aggaaacctt gctgcctact ctgagcaaca 360
 gcagtttctt ccattcaacc aactggctgc attgaactct gctgcttatt tgcaacaaca 420
 actaccattc agtcagc 437

<210> 671
 <211> 363
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-050-Q1-K1-G2

<400> 671

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cacgtccggg tcacctgcca cctccgggtgc atctcccacc gccgggtccac ctgccgccgc 120
cgggtccacct gccaccgccg gtccatgtgc cgccgccggt tcatctgccg ccgccaccat 180
gccactaccc tactcaaccg ccccggcctc agcctcatcc ccagccacac ccatgcccggt 240
gccaacagcc gcatccaagc ccgtgccagc tgcagggaac ctgccggcgtt ggcagcacc 300
cgatcctggg ccagtgcgtc gagttcctga agcatcagtg cagccccgacg gcgacgcct 360
act 363

<210> 672

<211> 330

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-050-Q1-K1-G4

<400> 672

at tt t t t g a g c a t t c a g a a c a c a c c a a g c g a a t c g c a c t a g c a a c a a c c t a a c a a c a a t g g 60
c t a c g a a g a g a t t a t c c c t c c t t g c g c t t c t t g c g c t t t t t g c g a g c g c a a c a a a t g c g t 120
c c a t t a t t c c a c a a t g c t c a c t t g c t c c t a g t t c c a t t a t t c c a c a g t t c c t c c c a c c a g 180
t t a c t t c a a t g g c c t t c g a a c a c c c a g c t g t g c a a g c c t a t a g g c t a c a a c a a g c g a t t g 240
c g g c a a g c g t c t t a c a a c a c c a a t t g c c c a a t t g c a a c a c a a t c c t t g g c a c a t c t a a 300
c a a t a c a a c c a a t c g a a c g c a a c a g c a a c 330

<210> 673

<211> 427

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-050-Q1-K1-G5

<400> 673

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t g g g g g t a g c g c a a t t c c c c g g c g a c a t c c a c g t g g c a g a a g t a g a c g c g g g c c g a t a c a 120
g a g a g g t g g a c c g a c g t g a c a t g t g c a a g a t g a a t c a c g g t g c g a g c a t t a c c g g a g g a 180

ggtgcaagat cgtggcaccg tgctgaaacc agatgttccc ctgacgtcac tgccacaacg 240
aggctacggc ttccggaaat ccgcatacaa tatgtagtca ggatgttcaa aaagtaattt 300
gcctactatg tgtaacaaaa caaacgggtg cacaagtgtg cataacctgt ggagtcaata 360
tgggagaata cttttgtgat atatgcaaat tatatgatga tgattcagac gaaaggcagt 420
accattg 427

<210> 674
<211> 380
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-050-Q1-K1-G6

<400> 674

attgagacca actagcaaca tagaaagcac aatagtgtac caacaatggc agccaaaaga 60
ttggggcctcc ttatgtcctt tgggtctttct gcaagtgtg ctacggcgac cattttcccg 120
caatgctcgc aagctcctat agcttccctt cttccccgt acctctcacc agcgggtgtct 180
tcggtatgtg aaaaccaat tcttcaacct tacaggatcc aacaggcaat cacagctggc 240
atcttaacct taataacctt ggttcttcca ccattaatca gccttatacc ataagttacc 300
ttgggggcaat taatggcacc aaaccttaag gcaccaccac ctccaccacc tggggctaca 360
aaacttggtg gcttacttta 380

<210> 675
<211> 445
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-050-Q1-K1-G7

<400> 675

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aagagattat ccttgcttgc gcttcttgcc ctttttgcca gtgcaacaaa tgcgttcatt 120
attccacaat gctcacttgc tccgagtgcc attattccac agttcctacc tccagttact 180
tcaatgggct tcgaacaccc agctgtgcaa gcctataagc tacaacaagc gcttgctgcg 240
aagcgtctaa aaccacccat ttgccaatta caacaacaat ccttggcaca tctaaccata 300

caaaccatcg caacgcaaca acaacaagca ctgaaccaac tagccgtggt gaaacctatc 360
gactacttgc aacaacagct gcttgcattc aacccaattg ctttggcaaa cgtagcttca 420
taccaacaac aacaacagtt gcaac 445

<210> 676
<211> 331
<212> DNA
<213> Zea mays
<223> Clone ID: LIB3061-050-Q1-K1-G8
<400> 676

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gaggcccgcgt gcttatttgc agcagcaaact actactacca ttttagccagc tagctgcagc 120
aaaccgtgct tccttcttga cacagcaaca gttgctgcct ttctaccagc agtttgcggc 180
taaccccgcga accctcttac aactacaaca attgttgccc tttgtccaac ttgctttgac 240
agaccagcg gacttctaac caccacacat cattggtggt gcgcctcttt aaaatggta 300
ttaactggaa tttcaatata aaagtttttg g 331

<210> 677
<211> 418
<212> DNA
<213> Zea mays
<223> Clone ID: LIB3061-050-Q1-K1-G9
<400> 677

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agcgcgagga gggccaagtt cgccatctac aacgtggtgg ccacctctc catcatcggg 120
tccgtgctgt tcgtgctgtt cctactcttc cgcggaggcc tcgcctacat attcaccgac 180
agccaggcgg tggcggacgc agtcgccggc ctctcgcccc tgctggcctt ctccatactg 240
ctcaacagcg tccagccagt gctgtcaagc gtcgctgtcg gcgcgggctg gcagagcgctc 300
gtcggctacg ttaacatcac ttcgtactac ctcatcgga tccctcttgg agccgtgctg 360
ggctacgcgc tggggcttca tgtgaagggc atctggatcg gcatgctgct cggaacgc 418

<210> 678
 <211> 246
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3061-050-Q1-K1-H1

 <400> 678

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 taggagatgg attattagtt atgattcaat agtagaaata tataggatga tgcaagttac 120
 ctcatagaac taagaagtta tattctcaat tatattgaga tcagatctgg gatgcgaact 180
 atctagaata agctgagata agacataagg ggcaatataa tatgggtgatg ttgtcacttg 240
 aagcct 246

<210> 679
 <211> 464
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3061-050-Q1-K1-F6

 <400> 679

 caactagcaa catagaaagc acaatagtgt accaacaatg gcagccaaaa tattttgggt 60
 cctgatgctc cttgggtattt ctgcaagtgc tgctacggcg accattttcc cgcaatgctc 120
 acaagctcct atagcttccc ttcttcccc gtacctctca ccagcgggtgt cttcgggtatg 180
 tgaaaaccca attcttcaac cctacaggat ccaacaggca atcgagctg gcattcttacc 240
 tttatcacc cttgttctcc aacaatcatc agccctatta cagcagttac ctttgggtgca 300
 tttattggca caaaacatca gggcacaaca actacaacaa cttgtgctag caaaccttgc 360
 tgccctactct cagcaacagc agtttcttcc attcaaccaa ctagctgcat tgaactctgc 420
 ttcttatttg caacaacaac aactaccatt cagccagcta cctg 464

<210> 680
 <211> 406
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3061-050-Q1-K1-E3

 <400> 680

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tagtgatagg tgctgacggg ggccacgcca ccccgacctc ttggcatttt cctgcccttg 120
gtttgcagct caccttcgac gtcggcgctca tcgccatctt cggccaccgg ctggccggcc 180
acgtgaagga ggagctgagg aggaactact tcaccatgga gaaaggctac aacagcttcc 240
ccatcccggg cgctgcacc agctacagcc aggccatcaa ggcgaggcag cggctggccc 300
cggtgctgac cggcatcctg gcggaccgga ggccccggcg aaccgactac tacgacgacc 360
atggcctcct gaacgcccta atgcgctccc ttgacaacag cggggc 406

<210> 681
<211> 441
<212> DNA
<213> Zea mays
<223> Clone ID: LIB3061-050-Q1-K1-E4
<400> 681

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caacatcaat tagctaactc caaaaaccat gaagctgggtg cttgtgggtc ttgctttcat 120
tgcttttagta tcaagtgttt cttgtacaca gacaggcggc tgcagctgtg gtcaacaaca 180
aagccatgag cagcaacatc atccacaaca acatcatcca cataaacaac aacatcaacc 240
accaccacaa catcaccagc agcagcaaca ccaacatcaa caagttcaca tgcaaccaca 300
aaaacatcag catcaacaag aagttcatgt tcaacaacaa caacaacaac cgtagtacca 360
acatcaacaa caacatcaac agtaccaaca acaacatcaa tgtgaaggcc aacaacaaca 420
taaccaacaa taacaaggcc a 441

<210> 682
<211> 375
<212> DNA
<213> Zea mays
<223> Clone ID: LIB3061-050-Q1-K1-E5
<400> 682

aaagagaacg gaatggccga gataacccta gagccgagtg atcttatggc gcatacaggc 60
aagagaatag tgccaaagtt cactgaaatc ttccccgtgg aggacgcgaa ctacccttac 120

agtgccttca tagcgtcggg ccggaagac gtgatcaaac actgcaccga ccataaagg 180
 atcttacaac ccgtactggc aactgaaaaa aagggaccgg agctatgggt ttacccaaag 240
 cttaaaacta ggaccagttc catcacgctt gccattcgca tggacaacct ggaccttggt 300
 ggcttcaaga ccccgggcag ggtgttggtg gaagtccgca aggaccggga cacccaactt 360
 cttggggaca acccc 375

<210> 683
 <211> 409
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-050-Q1-K1-E6

<400> 683

caacaagcaa catagaaagt ggaatccagt ttcaacaaca gagcaacaat ggcgaccaag 60
 atatgttccc tccttatgct ccttgctctt tctgcatgtg ttgctaacgc gacaattttc 120
 cctcaatgct cacaagctcc tatagcttcc cttcttcccc cataccttcc atcaatgata 180
 gcttcagtat gtgaaaaccc agctcttcag ccctataggc tccaacaagc aatcgagca 240
 agcaacatac ctttatcacc cttgttggtt caacaatcgc cagccctatc tttggtgcag 300
 tcattggtac aaaccatcag ggcacagcag cttgagcaac tcgtgctacc tgtgatcaac 360
 caagtagctc tggcaaacct tttctcctac tctcagcaac aacaatttc 409

<210> 684
 <211> 460
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-050-Q1-K1-E8

<400> 684

tcgcccacgc gtccgcccac gcgtccgatt cagaggaccc aatgtctact tgcagaaaga 60
 tggtgagctg gagaagtcac ttgaaattcc ctgaagaggc aaagcttcct cctgaagcta 120
 aggctctcat cagcaagctt ttgtgtaatg ttgagcatcg acttggtaca aaaggagccc 180
 atgaaataaa agcgcatcca tggttcggag gtgttcagtg ggagaagttg tatcagatga 240
 aagctgcttt cataccagaa gttaatggag agttggatac tcagaatttt gagaatttcg 300

aggagattgg aactcaaatt caaagttcat ccaagtcagg cccttggaga aagatgcttc 360
catccaaaga tgcaaaacttt gttgggtata cgtacaagaa ctttgaaatt gtgaatgatg 420
atgaagtggc aggaattgca cagttgaaga aaaagagttc 460

<210> 685
<211> 394
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-050-Q1-K1-E9

<400> 685

gcaattgctt ccattcaacc aactggcagc attgaactct gctgcttatt tacaacagcg 60
gcagcgacca ccattcagcc agctagctga tgtgagccct gttgccttct tgacacaaca 120
acagttgttg ccgttctacc tgcacgctgc gcctaacgct ggcacctct tacaactgca 180
acaattgctg ccattcaacc aacttgcttt gacaaaccca acaacgtttt accaacaacc 240
aataattggc ggggcccttt ttaaaatggc taataagtaa tagttaata aggaagtttt 300
tggaataagg ttgggggttt cccaaaatta gaaagggcct atttagaatc ctaaagggct 360
ttaagcctcc aaaaaaaaaa aaaaaggggg gcc 394

<210> 686
<211> 304
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-050-Q1-K1-F1

<400> 686

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tccttcgctc tcagatcaac acttactagt gatgtcattc cgcttgcttg attgtcacac 120
atattcacac ttcacccgat cctcttatca cgatatacct ttctgcatcc tacttgctta 180
ctgtcctcat ctgaaactcc aacccttcg ctatcgattt gacttccatt ctggaatctt 240
accactttca atcttacaac taaaacaatc aacttccttt ttacaaaatt taccttaatt 300
acat 304

<210> 687
 <211> 330
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3061-050-Q1-K1-F10

 <400> 687

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 gaggggggcta tttgcttact tccaagacgt attggcatca tgctgccgtg ctacaacttt 120
 atgacgtcca gaatgtgatc tgttatgaca agctgtacga ttacatcata gatctgtcgg 180
 tctcattctt actgtccgta cattatcgcc ctaacagagt ttgtatcttc actctaata 240
 tatctcagac accctacatc tgctgatact atataatcta atcactcttt cctctacttg 300
 aatcataact tgatatctat atatattcca 330

<210> 688
 <211> 430
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3061-050-Q1-K1-F11

 <400> 688

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 atatgttcca tccttatgct ccttgccttt tctgcatgtg ttgctaacgc gaccattttt 120
 cctcaatact cacaagctcc tatagctgcc cttcttcccc cataccttcc atcaatgacc 180
 gcttcagttt gtgaaaaccc agcccttcaa ccctacagggc tccaacaagc aatcgcaaca 240
 agcaacttac ctttatcacc cctgttcttt caacaatcgc cagccctatc tttggtgcag 300
 tcattggtac aaaccatcag ggcacaacag ctgcaacaac tcgtgctacc agtgatcagc 360
 caagtagctc tggcaaacct ttctccctac tctcagcaac aacaatttct tccattcaac 420
 caactgtcta 430

<210> 689
 <211> 450
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3061-050-Q1-K1-F12

<400> 689

atcagcatat acatctatca aatccttcaa agggagccct tactggatgg caccagaggt 60
tattatgaat agcaatgggtg cagcctttca gtagacattt ggagccttgg ctgcaccatt 120
cttgagatgg caacagcaaa gcctccttgg agtcagtatg aaggggtggc agcaatattc 180
aaaattggca acagcaaaga cataccagat atcccaaata atctttcttc tgaggcaaaa 240
agtttctga aactctgctt gcagcgtgat cctgctgccc gccctacagc tgctcagctg 300
atggatcacc cttttgtcaa ggaccaggct acagtcagga gttccaggtc cagtatcaca 360
agggatatgt ttcctaattc aactgacgga aaaaacagca gggtgaaaat tgaaacttcg 420
tcatacagaa gtttatctcc ttttaagagat 450

<210> 690

<211> 451

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-050-Q1-K1-F2

<400> 690

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cctgatgctg cttgggtcttt ctgcaagtgc tgctacggcg accattttcc cgcaatgctc 120
gcaagctcct atagcttccc ttcttcccc gtacctctca ccagcgggtgt cttcggtatg 180
tgaaaaccca attcttcaac cctacaggat ccaacatgca atcacagctg gcatcttacc 240
tttatcacc ttgttctctc aacaatcatc agccctatta catcagttac ctttggtgca 300
tttattggca caaaacatca gggcacatca actacaacaa cttgtgctag caaaccttgc 360
tgcttactet cagcaacagc agtttcttcc attcaaccaa ctagctgcat tgaactctgc 420
ttcttatttg caacaacaac aactaccatt c 451

<210> 691

<211> 447

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-050-Q1-K1-F3

<400> 691

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 ccaaaatatt ttgcctcctt atgctccttg gtcgttctgc aagtgtgtgt acggcgacca 120
 ttttcccgca atgctcgcaa gtcctatag ctcccttct tccccgtac ctctcaccag 180
 cgggtgtcttc ggtatgtgaa aaccaattc ttcaacccta caggatccaa caggcaatcg 240
 cagctggcat cttaccttta tcacccttgt tcctccaaca atcatcagcc ctattacaac 300
 agttaccttt ggtgcattta ttggcacaaa acatcagggc acatcatcta caacaacttg 360
 tgctagcaaa ccttgctgcc tactctcagc accagcagtt tcttccattc aaccaactag 420
 gttaattgaa ctctgcttct aatttgc 447

<210> 692
 <211> 269
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-050-Q1-K1-F4
 <400> 692

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 tacctgggct ctgcgcctaa cgctggcact ctcttacaac tgcaacaatt gctgccattc 120
 aaccacttg ctttgacaaa cccaacatcg ttctaccaac aaccatcat tggtggcgcc 180
 ctcttttaaa tcgattatga gctatactat aataatgaag gcttttggat gatgtctggg 240
 gctttccaaa aattagaatg tacatttct 269

<210> 693
 <211> 441
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-050-Q1-K1-E2
 <400> 693

ctccagctc agctaccctc tccaatcgca gttgcagttg cggctgggct aggctttcgt 60
 caggagcacg gtccctccct cggctcttga cagatcgaa tgcttccatc agcaattcaa 120
 tcgggagatg gccaccactc agttcgccat gggtgaggag ctggcctcgc tcatcaagga 180
 caacctgcac agcaagcatc tcctcctctc caccgatgag tccctcgtcg cagccctcca 240

agagctgcac tgccgtgaag aggacgacgg cgcggcggat acgatagaac tccagcctgc 300
 cggggcctac caccgtcttc tcttgcacgc ccttgctgaa atttatgggc tcgcgcacga 360
 atcggccggg gaaggcgaag atcgacattt ggtcctacag cgcttccccg aaacagccat 420
 tccatctggg cttggtagtg a 441

<210> 694
 <211> 394
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-044-Q1-K1-B8

<400> 694

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 cgtgcccaaca gccgcaccca agcccgtgcc agctgcaggg aacctgcggc gttggcagca 120
 ccccgatcct gggccagtgc gtcgagttcc tgaggcatca gtgcagcccg acggcgacgc 180
 cctactgctc gcctcagtgc cagtcgttgc ggcagcagtg ttgccagcag ctcaggcagg 240
 tggagccgca gcaccggtac caggcgatct tcggcttggg cctccagtcc atcctgcagc 300
 agcagccgca aagcggccag gtcgcggggc tgttggcggc gcagatagcg cagcaactga 360
 cggcgatgtg cggcctgcag cagccgactc catg 394

<210> 695
 <211> 243
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-044-Q1-K1-B9

<400> 695

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 cttatgctgg ctggtctttc tacatggggg ggtaacgcga caattttccc tcaatgctca 120
 caagctccta tagcttcctt tttttcccca taccttccat caattatagc ttcagtatgt 180
 gaaaaccag ctcttcaacc atataagctt caacaagcaa tcgcagcaag caacatacct 240
 tta 243

<210> 696
 <211> 371
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-044-Q1-K1-C1

<400> 696

cttccttccg cggactagtt ttttctgaag attcggcgat ggcggcgacg atccaatggc 60
 gtgaaggcgc gccagatctt tgacagccgc ggcaacccta cagtcgaggt cgacgtgttt 120
 tgctcagatg gaacctttgc aagggcagct gttcccagtg gagcatcaac tgggtgtatat 180
 gaagctctgg agttgaggga tgggtggctct gactatttgg ggaaggggtgt ctccaaggct 240
 gtgaacaatg tgaattctgt tattggacct gctctgattg gcaaggaccc tacagcacag 300
 actgagattg ataacttcat ggttcaacaa cttagatggga ccaaaaatga gtgggtgatgg 360
 tgcaagcaaa a 371

<210> 697
 <211> 418
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-044-Q1-K1-C10

<400> 697

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 gagattgtgg gtcctaata caaaagactg gtccagcaac ttgttggcgg agctaatact 120
 tccaggcagg aagaagcatt gaagaagaac aaaccaatca ttgttgtcgg aacacctggc 180
 cgtatttctg aaatttctgc agcaggtaag ctacacactc atggctgccg ttttcttgta 240
 ctggatgaag tcgaccagct tctgtctttt aattaccgtg aagatatgca tagaattttg 300
 gagcatgttg gaaggagacc tggaggcaca tctagggata ttcttggccc acttgcgaga 360
 cgatctgagc gtcagactat cctggtttct gcaacaatac cattttcagt tatacgag 418

<210> 698
 <211> 423
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-044-Q1-K1-C11

<400> 698

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cctccggatg ctccttggtc tttctgcaag tgctgctacg gcgaccattt tcccgcgaatg 120
ctcgcaagct cctatagctt cccttcttcc cccgtacctc tcaccagcgg tgtcttcggt 180
atgtgaaaac ccaattcttc aaccctacag gatccaacag gcaatcacag ctggcatctt 240
acctttatca cccttggttc tccaacaatc atcagcccta ttacatcagt tacctttggt 300
gcatttattg gcacaaaaca tcagggcaca acaactacaa caacttggtc tagcaaacct 360
tgctgcctac tctcagcaac agcagtttct tccattcaac caactagctg cattgaactc 420
tgc 423

<210> 699

<211> 404

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-044-Q1-K1-C12

<400> 699

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gacagagaat ggaggcaagc atattaacac atttaatgcc aactcacag attgatatat 120
atgtccaagt tcttcaagct gatgggtggaa caaggtcagc ttgcataaat gctgcaacac 180
tagctcttgc agatgctggg attccaatgc gagacattgc cacatcatgt agtgctgggt 240
atctgtgttc tactcctttg ctcgatctga attacctga agacagtgc ggggggttctg 300
atgtcactgt tggcattctt gcaaagatgg acaaagtgac tttgcttcag atggatgcaa 360
aattaccaat tgatacattt gaaaatgtaa tgggacttgc aata 404

<210> 700

<211> 446

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-044-Q1-K1-C2

<400> 700

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ctccttatgc tccttgggtct ttctgcaagt gctgctacgg cgaccatttt cccacaatgc 120
tcacaagctc ctatagcttc cctttcttcc cccgtacctc tcaccaacgg tgtcttcggt 180
atgtgaaaac ccaattcttc aaccctacag gatccaacag gcaatcgag ctggcatctt 240
acctttatca cccttggttc tccaacaatc atcagcccta ttacagcagt tacctttggt 300
gcatttattg gcacaaaaca tcagggcaca acaactacaa caacttgtgc tagcaaacct 360
tgctgcctac tctcagcaac agcagtttct tccattcaac caactagctg cattgaactc 420
tggttcttat ttgcaacaac aacaac 446

<210> 701
<211> 353
<212> DNA
<213> Zea mays
<223> Clone ID: LIB3061-044-Q1-K1-C3
<400> 701

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tactctaagt accaccatca tcttccactt ctctatcgt tcaacctgta ccccgctggt 120
aacctggatg attatatgct actaccattt ctactactat ctacacagct ccgtgcttcc 180
ttcttgactc agttactgac gctgcatctg tacctgcatt tctaccataa ccccgagct 240
atcttacaac tactacaact gctgccataa gtgcaactcg ctgtgacaga cgctgcgacc 300
tactaccagc aacacttcat tgatcacatc atctgtgata ccgtttatta gat 353

<210> 702
<211> 445
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB3061-044-Q1-K1-C4
<400> 702

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cagctcagga aggtctgccc cacgcccagc tccccgtgct gctccagtga ggaacccgcc 120
acagccagca cgccaggtc ctctccagc tctgttcca gatgggtggtg gctccatggt 180

tggaggaatt ggggccacca ttgctcaagg tatggcgttt ggcacgggta gtgccatggc 240
acacagggct gttgatgctg tattaggtcc ccggaccatt cagcatgaga ctgttgctc 300
agaagctgct gctgctgccc ctgcccctcc agtcatgaat gctgatgctt gcagcatcca 360
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ctacctagac atgctgaacg agtgc 445

<210> 703
<211> 363
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-044-Q1-K1-C5

<400> 703

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ttcctcaat gtcacaagc tcctatagct tcccttctta ccccatacct tccatcaatt 180
atagcttcaa tatgtgaaaa ccagctctt caaccatata ggcttcaaca agcaatcgca 240
gcatgcaaca tacctttatc gcccttggtg tttcaacaat cgccagccct atctttggtg 300
cagtcattgg taaaaaccat cagggcacaa cagctgcagc aactcgtgct acctatgatc 360
aac 363

<210> 704
<211> 438
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-044-Q1-K1-C6

<400> 704

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actaccagtc agccagctat ctgctgccta cccccagcaa tttcttccat tcaaccaact 120
gacagcattg aactctcctg cttatttaca gcagcaacaa ctactaccat tcagccagct 180
agctgggtgtg agccctgcta ccttcttgac acaaccacag ttgttgccgt tctaccagca 240
cgctgcgcct aacgctggca ccctcttaca actgcaacaa ttgttgccat tcaaccaact 300

tgctttgaca aaccacagcag cattctacca acaaccacac attggtggtg cctcttttta 360
gatttcttat gagttatagt tcaataataa agtttttgtc tgatggtgtg gcttcccaga 420
aataagaagt acatttct. 438

<210> 705
<211> 373
<212> DNA
<213> Zea mays
<223> Clone ID: LIB3061-044-Q1-K1-C7
<400> 705

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gatatttgcc atccttatgc tccttgctct ttctgcatgt gttgctaacg cgaccatttt 120
tcctcaatac tcacaagctc ctatagctgc ccttcttccc ccataccttc catcaatgac 180
cgcttttagta tgtgaaaacc cagcccttca accctacagg atccagcaag caatcgcaac 240
aagcaactta cctttatcac acctgttctt tcaacaatcg ccagccctat ctttggtgca 300
gtcattggta caaaccatca gggcagaaca gttgcagcaa ctctgtgtac cagtgatcag 360
ccaagtagct ctg 373

<210> 706
<211> 346
<212> DNA
<213> Zea mays
<223> Clone ID: LIB3061-044-Q1-K1-C8
<400> 706

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gaccattgtc ccgcaatgct cgcaagctcc tatagcttcc cttcttcccc cgtacctctc 120
accagcggtg tcttcggtat gtgaaaaccc aattcttcaa ccctacagga tccaacaggc 180
aatcgagct ggcattctac ctttatcacc cttgttcttc caacaatcat cagccctatt 240
acaacagtta cctttggtgc atttattggc acataacac agggcacaac aactacaaca 300
acttgtgcta gcaaaccttg ctgcctactc tcagcaacag cagttt 346

<210> 707

<211> 406
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3061-044-Q1-K1-D1

 <400> 707

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 cttactgaca aagateccaa tgttacggtc aaccctgatg aggttggttc tcttggggca 120
 gctgtgcagg gtgggggtttt ggcaggagac gtgaaagatg tagttcttct ggatgttact 180
 ccattatctc ttgggtttgga gacattggga ggagtgatga caaagattat ccccaggaat 240
 accacactgc caacctcaaa atcggaggta ttctcaacag ctgcagatgg acagacgagc 300
 gttgagatta atgttctcca gggagaaaaga gagtttgtca gggacaacaa gtccggttga 360
 agcttccggg ttgatgggat cctcctgca cctcgtggtg tcccac 406

<210> 708
 <211> 420
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB3061-044-Q1-K1-D10

 <400> 708

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 gcttccaaga cattatccct ccttgcgctt cttgcccttt ttgtgagtgc aacaaatgcg 120
 ttcattattc cacaatgctc actngctccg agtgccatta ttccacagtt cctccctgca 180
 gttacttcaa tgggcttcga acaccagct gtgcaagcct ataggctaca acaagcgctt 240
 gcggcgagcg tcttagaaca accaattgcc caattacaac aacaatcctt ggcacatcta 300
 accatacaaa ccatcgcaac gcagcatcaa caagcactga gccacctagc cgtgggtgaac 360
 cctatcgctt acttgcaaca acagctgctt gcatccaacc cacttgcttt ggcaaacgta 420

<210> 709
 <211> 415
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3061-044-Q1-K1-D11

<400> 709

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agctcctata gcttcccttc ttcccccgta cctctcacca gcggcgctctt cggtatgtga 180
aaaccaatt cttcaaccct acaggatcca acaggcaatc gcagctggca tcttaccttt 240
atcaccttg ttctccaac aatcatcagc cctattacag cagttacctt tgggtgcattt 300
attggcacia aacatcaagg cacaacaact acaacaactt gtgctagcaa accttgctgc 360
ctactctcag caacagcagt ttcttgcat caaccaacta gctgcattga actct 415

<210> 710

<211> 409

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-044-Q1-K1-A3

<400> 710

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atggcagcca aaatattttg cctccttatg ctcccttgga tttctgcaag tgctgctacg 120
gcgaccattt tcccgcaatg ctcaaacgt cctatagctt cccttcttcc cccgtacctc 180
tcaccagcgg tgtcttcggt atgtgaaaac ccaattcttc aaccctacag gatccaacag 240
gcaatcgtag ctggcatctt acctttatca cccttggttc tccaacaatc atcagcccta 300
ttacagcagt tacctttggt gcatttattg gcacaaaaca tcagggcaca acaactacaa 360
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<210> 711

<211> 418

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-044-Q1-K1-A4

<400> 711

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tcattatctcc acaatgctca cttgctccga gtgccattat tccacagttc ctcccttcag 180
 ttacttcaat gggcttcgaa caccagctg tgcaagccta taggctacaa caagcgcttg 240
 cggcgagcgt cttagaacaa ccaattgccc aattacaaca acaatccttg gcacatctaa 300
 ccatacaaac catcgcaacg cagcagcaac aagcactgag ccacctagcc gtggtgaacc 360
 ctatcgcccta cttgcaacaa cagctgcttg cattcaaccc acttgctttg gcaaacgt 418

<210> 712
 <211> 272
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-044-Q1-K1-A6

<400> 712

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 ctaactcttg tgagccctac taccttcttg acacaaccac agctgttgcc attctaccat 120
 caggttcgc ctaacgctgt caccctatta caactgcaac aattgctgac attcaaccaa 180
 cttgctttga caaacccatc actgttctac caacaaccca tcattagtag taccctcttt 240
 tagatttctt atgagttata attcaataat aa 272

<210> 713
 <211> 377
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB3061-044-Q1-K1-A7

<400> 713

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 cggggctgca gggcttgtag ggcgctggcg ccggcctgac gacgatgatg ggcgcggcg 180
 ggctgtaccc ctacgcggag tacctgagcg agccgcagtg cagcccgtg gcggcggcg 240
 cctactacgc cgggtgtggg cagccgagcg ccatgttcca gccgctccgg caacagtgt 300
 gccagcagca gatgaggatg atggacgtgc agtccgtcgc gcagcagctg cagatgatga 360

<210> 714
<211> 307
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-044-Q1-K1-A8

<400> 714

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tatgtctcctt ggtctttctg caagtgttgc taccgcaacc attttcccac aatgttcaca 120
agctcctata gcttcccttc ttccccata cctctcacca gcggtgtctt caatgtgtga 180
aaccccaatt gttcaaccct acaggatcca acaggcaatc gcaacaggca tcttaccatt 240
atcaccccttg ttctccaac aaccgtcagc cctattacag cagttacctt tgggtccattt 300
ggtggca 307

<210> 715
<211> 429
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-044-Q1-K1-A9

<400> 715

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ctactctcag caacaacaac ttcttcatt taaccaattg gccgcaactga accccgctgc 180
ttatttgcag cagcaaatac tactgccatt tagcgagcta gctgcagcaa gtcgtgcttc 240
cttcttgaca cagcaacagt tgctgccttt ctacaagcag tttgcggcta accccgcaac 300
cctcttacia ctacaacaat tgttgccctt tgtccaactt gctttgacaa acccagcagc 360
cttctaccaa caacacatca ttggtggtgc cctcttttaa attgattatt agttgtaatt 420
caataataa 429

<210> 716
<211> 417
<212> DNA

<213> Zea mays
 <223> Clone ID: LIB3061-044-Q1-K1-B1
 <400> 716

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 agcttgaacg tggagagaag ggcattggag atgggacagt gagctatgga atggatgacg 180
 cagatgacat ctacatgcga tcatggactg gcactattat tggccctcat aataccgtcc 240
 atgagggtcg catctaccag ctgaagttgt tctgcgacaa ggactaccct gagaagccac 300
 catcagttcg atttcattca agaataaact taacatgcgt taatcatgaa actggagtgg 360
 ttgacccgaa gaagttcagc gttctgggta actggcaacg tgattactca atggaat 417

<210> 717
 <211> 421
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-044-Q1-K1-B10

<400> 717

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 cacggggccct gacgcactcg cctcgccggc cggctcctcc cgcccagcc tcaagccggc 120
 cgcgggggatt acgcccggca tgttcggcgc gccggtcacc gagcaggagg ccgaggatct 180
 gagcaagagt gaaaggaaat tttgctctgg ctcaaagttg aaagagatgg gtgggagtgg 240
 gattttttgct gagaagagtg aaaatgggtga tgcagaggct tcaaatactg ctaacaagac 300
 ttccttgagg atgtaccagc aaactgtgac tggaataagc cagatttcat ttagcgctga 360
 tggaagtgtt tcaccaaaga agccatcgtc gatacctgag gtggctaagc agcgagagct 420
 t 421

<210> 718
 <211> 366
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-044-Q1-K1-B11

<400> 718

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acaacagcaa caacttcttt catctagccc gctcgctatg ggcaatgcac ctacatacct 120
gcaacaacag ttgttgcaac aacagtgtgt gcaacaaatt gtaccagctc ttactcagct 180
agctgtggca aaccctgctg cctacttgca acaactactt ccattcaacc aactgactgt 240
gtcgaactct gctgcgtacc tacaacagcg acaacagtta cttaatccac tagcgggtggc 300
taaccattg gtcgctgcct tctacagca gccacaatgg ctgccatata accagttctc 360
tttgat 366

<210> 719

<211> 416

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB3061-044-Q1-K1-B12

<400> 719

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cgggtggcgcg gtcaggtgaa ccatggcgga ctccaaagcc acctcggcgg tcaccctccg 120
cacccgcaag ttcattgacca accgcctnct ggcccgaag caattcgtgc ttgaggtgat 180
ccaccccggc cgcgccaacg tctccaaggc ggagttgaag gagaggcttg ccaaggcgta 240
cgaggtgaag gaccccaaca ccatctttgt cttcaagttc cgcacccact tcggaggagg 300
aaagtcact ggtttcggcc tcattctacga caacctcgag gctgccaaga agttcgagcc 360
gaaataccgn ctcattcagga atggtcttgc tactaaggtt gagaagtccc gcaagc 416

<210> 720

<211> 440

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB3061-044-Q1-K1-B3

<400> 720

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gcaagcggcg gcgtgcgcg agcaagcgac tacgccgtgg agtgcgacct acagcctgca 120
gcctccagga gtaaagttca taagaggaag aggaatgggt aaagaaacag aggtcaatga 180
atatgaacta cagagggctg ccaacataag agaaaatatg aagaggatga gatctcttaa 240
tctccctgta cctagtacta tgggttaatga agcaaattgga tcacatcgag ccagcaagaa 300
acacaagaca aggaaattag catattcaac taatgggtcct actttgcat caaggactca 360
nagggatatt gttgacgata accatgagga tagtacttct gaaatagtta tggagaatct 420
aaatatccca tcaatgatga 440

<210> 721
<211> 443
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-044-Q1-K1-B4

<400> 721

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gccaaactagc tgtgggtgaac cctgtcgctt acttgcaaca gcagttgctt gcatccaacc 120
cacttgctct ggcaaacata gttgcatacc aacaacaaca acaattgcaa cagtttctac 180
cagcgctcag tcaactagcc atgggtgaacc ctgccgcta cctacaacag caacaactga 240
tttcatctag cctctctgct gtgggttaatg cacctacata cctgcaacaa cagttgctgc 300
aacagattgt accagctctg actcagctag ctgtggcaaa cctgtctgcc tacttgcaac 360
agctgcttcc attcaacaa ctgactgtgt cgaactctgc tgcgtaccta caacagcgac 420
aacaggtact taatccacta gcg 443

<210> 722
<211> 367
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-044-Q1-K1-B5

<400> 722

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gcgctcgctg cgagcgccgc ctccagtaca agcggcggct gtggctgcca gacaccaccg 120

tttcatctac cgctccgtt ctatatgccg cctccgttct atctgccgcc gcagcagcag 180
 ccgcagccat ggcaataccc cactcaacca ccgcagctaa gcccgtgccg gcagttcgga 240
 tcttgccggc tgggcagcgt cggcagcccc ttcttgggcc agtgcgtcga gttcctgagg 300
 caccagtga gcccggcggc gacgccctac ggctcgccac agtgccaggc gctgcagcag 360
 cagtgtc 367

<210> 723
 <211> 437
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB3061-044-Q1-K1-B6

<400> 723
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 gggcgtccaa gacctaccg cagcaggctg gcaccgtccg taagaacggc ttcacgtca 180
 tcaagaaccg tccttgcaag gttgtggagg tttctacctc caagactggg aagcatggcc 240
 acgccaaatg ccactttgtc gccatagaca tattcaatgg gaaaaagctt gaagatattg 300
 ttctttcatc acacaactgt gacattccgc atgtgaaccg tactgagtat cagctgattg 360
 atatttctga ggatggattt gtgagccttc ttacttcaga tggcaacact aaggatgatn 420
 ctagactccc aactgat 437

<210> 724
 <211> 423
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-044-Q1-K1-A11

<400> 724
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 ctctcttatg ctctttggc tttctgcaag tgctgtacc gcaaccattt tcccacaatg 120
 ctcaacagct cctatagctt cctttcttcc cccatacctc tcaccagcgg tgtcttcagt 180
 atgtgaaaac ccaattcttc aaccctacag gatccaacag gcaatcgcag caggcatctt 240

acctttatca cccttggtcc tccaacaacc gtcagcccta ttacagcagt tacctttggt 300
gcatttggtg gcacaaaaca tcaaggcaca acaactacaa caacttgtgc taggaaacct 360
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tgc 423

<210> 725
<211> 449
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-043-Q1-K1-G9

<400> 725

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ccttgctctc ctggcgctcg ctgcgagcgc cgcctccagt acaagcggcg gctgtggctg 120
ccagacacca ccgtttcatc taccgcctcc gttctatatg ccgcctccgt tctatctgcc 180
gccgcagcag cagccgcagc catggcaata cccactcaa ccaccgcagc taagcccgtg 240
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cgagttcctg aggcaccagt gcagcccggc ggcgacgccc tacggctcgc cacagtgcc 360
ggcgctgcag cagcagtgtc gccaccagat caggcagggtg gagccgctgc accggtacca 420
ggcgacatac ggggtggtcc tgcaatcct 449

<210> 726
<211> 445
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB3061-043-Q1-K1-H1

<400> 726

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ggcgactgg atccgggtgg agcctgtgcc cggcgcttc gtcgtcaact tcggatgcc 120
gcttgagggt gtgacgaacg ggatcttgaa gagcatcgag caccgggtga tgaccaacct 180
gggagtggcg cggacaacgg tggccacgtt catcatgccc accacggact gcctcatcgg 240

ccccgccgcc gagttcctca gcgacgacaa cccgccgtgc taccgcaccc tcaccttcgg 300
cgacttcaag cgcactctaca gcgttgtcaa gctgggctcg tcgctcaacc tcaccacaaa 360
tctcaagacc gttcagaagg agctctgatt atccatcaaa ctttgtagcc tncctcgaat 420
tggcggcgag gaactagcta gctag 445

<210> 727
<211> 446
<212> DNA
<213> Zea mays
<223> Clone ID: LIB3061-043-Q1-K1-H10
<400> 727

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gaaagcactg ccaaccgcgg cctctgtggg cggcggcggc ggcagcagca ccgcgccgcc 120
cgggcagccg accacggtag cgtccaaggt gctggacatg ggcgcggcgg cgatgcagtc 180
gttgcgcccc gtgaagcagg cgaagcagca catgtgcacg ttcgcgctgt acgcgcacga 240
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gtgcgcgcgtc tatgactccg acaaagccga cgcgcgtctc atcggcgtgg agtacatcgt 360
gtcgagggag atctttgact cgctgccggc ggaggagcag cggtgtggc actcgcacgc 420
gcacgagatc aagtcaagcc tgtgga 446

<210> 728
<211> 339
<212> DNA
<213> Zea mays
<223> Clone ID: LIB3061-043-Q1-K1-H11
<400> 728

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ctaccgagat attagccctc cttgcgcttc ttgccctttt agtgagcgca acaaatgcgt 120
tcattattcc acagtgtcct cttgctccta gtgccattat tccacagttc ctaccaccag 180
ttacttcaat gggcttcgaa catccagccg tgcaagccta caggctacaa cttagcgttg 240
cggcgagcgc cttacaacaa ccaattgccc aattgcaaca acaatccttg gcacatctaa 300

ccctacaaac cattgcaacg caacaacaac aacaacaac

339

<210> 729

<211> 380

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-043-Q1-K1-H12

<400> 729

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tctcgtcgtg tgccctggctc tgcagctgc cagcgccctc gcaatgcaga tgccctgccc 120
ctgcgcgggg ctgcagggct tgtacggcgc tggcgccggc ctgacgacga tgatgggccc 180
cggcggggctg taccctacg cggagtacct gaggcagccg cagtgcagcc cgctggcggc 240
ggcgccctac tacgcccggg gtgggcagcc gagcgccatg ttccagccgc tccggcaaca 300
gtgctgccag cagcagatga ggatgatgga cgtgcaagcc gtcgcgcagc agctgcagat 360
gatgatgcag cttgagcgtg 380

<210> 730

<211> 441

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB3061-043-Q1-K1-H2

<400> 730

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tgcttaattg gttctaattg cattatttca cagattcttc caccacatac tctaattggc 180
ttgaaacatt cgnaccgcgc aagctataca ggttacatct agcgcttgcg gagagcgctt 240
tacaacaacc aatggcccaa ttgcaacaac aatccttggc acatctaacc atacaaacca 300
ttgcaacgca acaacaacaa caacaacagt ttctgccatc actgagccac ctgacgctgg 360
tgaaccctgt cacctacttg caacagcagc tgcttgcac caaccactt gctctggcga 420
acgtagctgc ataccagcaa c 441

<210> 731
 <211> 462
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-043-Q1-K1-H3

<400> 731

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 attacagcag ttacctttgg tccatttggg ggcacaaaac atcagggcac aacaactaca 180
 acaacttggt ctagcaaacc ttgctgcata ctctcagcaa catcagtttc ttccattcaa 240
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 tgcttattta cagcagcaac aactactacc attcagccag ctagctgatg tgagccctgc 420
 tgccttcttg acacaacaac agttgttgcc gttctacctg ca 462

<210> 732
 <211> 441
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-043-Q1-K1-H4

<400> 732

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 catcgccgct gccgaggaat gcaggaagcg gctcctggcg ctgaagggca tcccggaact 180
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 tcgctgctcc ctgatggttg ccgagtcctt ttttatattt accttacctt gaaggccgtt 360
 gtgtcttgtc tggaataaat caagattgac tggcactgaa agtgtcatcg cgtcactctt 420
 tcatacttat taataaatat c 441

<210> 733
 <211> 436

<212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-043-Q1-K1-H5
 <400> 733

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 attacgcctg cgatgttcgg cgcgccggtc accgagcagg aggccgagga tctgagcaag 180
 agtgaaagga aattttgctc cggatcgaag ttgaaagaga tgagtgggag tgggattttc 240
 gctgagaaga gtgaaaatgg tgactcagag gcttcaaadc ctgataacaa gacttccttg 300
 aggatgtacc atcaaaactg gactggaata agccagattg catttactgc tgatggaagt 360
 gttacaccga agaagccgct gtcaatacct gacgtggcta agcagcgaga gcttattggc 420
 accctggaac atgctg 436

<210> 734
 <211> 435
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-043-Q1-K1-H6
 <400> 734

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 gcggctccgt tggcggaggc gcgcgtgtgc cggcgccgga gcgcgggctt caaggggggc 180
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 tgcgacggca tcatgcgcca gtgcaagtgc atcatggagt gctagctagc taggctctag 300
 gatctagcaa gctagctata tcggccttta attaaattaa taaggatcga cgctgtggcc 360
 ggtcgctaaa tatgtactac tatacgttta cactacatgc aataatgcac cacatgtacg 420
 cgtacgcgcg ccgag 435

<210> 735
 <211> 443
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-043-Q1-K1-H7

<400> 735

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gcttcccttc tcccccata cctctcacca gcggtgtctt caatgtgtga aaccccaatt 180
gttcaaccct acaggatcca acaggcaatc gcaacaggca tcttaccatt atcacccttg 240
ttcctccaac aaccgtcagc cctattacag cagttacctt tgggtccattt ggtggcacia 300
aacatcaggg cacaacaact acaacaactt gtgctagcaa accttgctgc atactctcag 360
caacatcagt ttcttccatt caaccaactg gctgcattga actctgctgc ttatttgcaa 420
caacaattac cattcagcca gct 443

<210> 736

<211> 430

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB3061-043-Q1-K1-H8

<400> 736

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gagagcaccc tccatctggt gctccgcctg aggggtggta tgcagatctt tgtgaagacc 180
ttgactggca agaccataac cctggagggt gagagctctg acaccatcga caacgtgaag 240
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aagcagctgg aggatggctg cacccttgca gactacaata tccagaagga gagcacctn 360
cacctggtgc tccgtcttcg cgggtggtat taagccatca gtcgttgaaa cttgtgctgt 420
atctgggtat 430

<210> 737

<211> 451

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-043-Q1-K1-H9

<400> 737

gaaagtggaa tccagtagca acaatagagc aacaatggcg accaagatac tttccctccg 60
tatgcgctt gctctttctg catgtgttgc taacgcgaca attttccctc aatgctcaca 120
agctcctata gcttcccttc tttcccccata ccttccatca atgatatgctt cagtatgtga 180
aaaccagct cttcaaccct atagggtcca acaagcaatc gcagcaagca acataccttt 240
atcaccttg tttcaacaat cgccagccct atctttggtg cagtcattgg taaaaacat 300
caaagcacag cagctgcagc aactcgtgct acctgtgatc aaccaagtag ctctggcaaa 360
cctttctccc tactatcagc aacaacaatt tcttccattc aaccaactat ctacactgaa 420
ccctgctgct tatttgcagc aacaactatt a 451

<210> 738

<211> 363

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-044-Q1-K1-A1

<400> 738

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ctaccattca tccagctagc tgggtgtgagc cctgctacct tcttgacaca accacagttg 120
ttgccgttct accagcacgt tgcgcctaac gctggcacc ttttacaact gcaacaattg 180
ctgccattca accaacttgc tttgacaaac ccatcagtgt tctaccaaca acccatcatt 240
ggtggtgccc tcttttagat ctcttatgag ttatagttca ataatatagc tttgtatctg 300
atgttggtgg cttccaagaa ataagaaagt acatttctaa tagagctacc tgtgatcaag 360
ggc 363

<210> 739

<211> 400

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-044-Q1-K1-A10

<400> 739

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 ttcttttcatt caacgaactg gcagcattga aactctctgc ttattttacag cagcaacaac 120
 tactaccatt cagccagcta gctgggtgtga gccctgctac cttcttgata caaccacagt 180
 tgttgccggt ctaccagcac gctgcgctta acgctggcac cctcttataa ctgcaacaat 240
 tgctgccatt caaccaactt gctttgacaa acccagcagc gttctaccaa caaccatca 300
 ttgggtgggtgc cctcttttag atttcttatg agttatagtt caataataaa gttttttgtc 360
 tgatgtttgt ggcttcccag aaataagaaa gtacatttct 400

<210> 740
 <211> 376
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-043-Q1-K1-G8

<400> 740

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 ggtattttctg caagggctgc tacggcgacc attttcccgcc attgctcaca agctcctata 120
 gcttcccttc tcccccgta cctctcacca gcgggtgtctt cggtatgtga aacccaattt 180
 tttaaccctt acgggtgcca acgggtattc gcagggtgtct tatcactatt acccccgttg 240
 ctctacaat catcatcccc attatagcag ttacccttgg tgcacatatt gtcgcaaaaa 300
 atcatggcgc aacaactact acaacttgtg ctagcaaacc atgctgccta ctcttatcaa 360
 caaccagttt ttttca 376

<210> 741
 <211> 449
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-058-Q1-K1-H9

<400> 741

gcaacaatgg cgaccaagat attttccctc cttatgctcc ttgctctttc tacatgtggg 60
 gctaacgcga caattttgcc tcaatgctca caagctccta tagcttccct tcttccccca 120
 taccttccat caattatagc ttcagtatgt gaaaaccag ctcttcaacc atataggctt 180

caacaagcaa tcgcagcaag caacatacct ttatcgccct tgttggttca acaatcacca 240
gccctatctt tgggtgcagtc attggtacaa accatcaggg cacaacagct gcagcaactc 300
gtgctacctg tgatcaacca agtagctctg gcaaaccctt ctcctactc tcagcaacaa 360
caatttcttc cattcaacca actgtctaca ctgaaccctg ctgcttattt gcagcaacaa 420
ctattacat ttagccagct agctactgc 449

<210> 742
<211> 343
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-058-Q1-K1-G6

<400> 742

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atcacaatgg gtttgggagg agagggctat cttaatttca tgggaaatga gactggacat 120
tctgaatgga tagattttcc aagaggctcg caaagactta caagtggtaa gtttattcca 180
gagaataaca accgttatga caaatgtcgt ctaagatttg acctgcgtga tgcacactat 240
cttaggtatc atggtatgca agagtttgat caggcaatgc aacatcttca gcaaaaaatat 300
gaattcatga catctgatca ccagtatata taccggaaac atg 343

<210> 743
<211> 427
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-058-Q1-K1-G7

<400> 743

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ttttgcttcc ttatgtcctt tgggtctctt gcaagtgttg ctaccgcaac cattttccca 120
caatgtcac aagctcctat agcttccctt cttcccccat acctgtcacc agcgggtgtct 180
tcaatgtgtg aaaccccaat tgttcaacct tacaggatcc aacaggcaat cgcaacaggc 240
atcttaccat tatcaccctt gttcctacaa caaccgtcag cctattaca gcagttacct 300
ttggtccatt tgggtggcaca aaacatcagg gcacaacaac tacaacaact tgtgctagca 360

aaccttgctg catactctca gcaacatcaa tttcttccat tcaaccaact ggctgcattg 420

aactttg 427

<210> 744

<211> 434

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB3061-058-Q1-K1-G8

<400> 744

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cactggataa tgaagtgcac tgggtgtata tcaatctgac aactatgga accccaataa 120

tatgcactgc tgtataatta ggttctgtta ctgcattttg agattccttt tgtttgaaga 180

aatgctaaat ttgacatctc tcttttgttg acaacttagg tacgactacc atgctggttt 240

ttgggggtgc atgggacggg aatgtattgg cattgtccct ccatttatta gagaatttaa 300

ttatccgatg gccaaaaatt gtgccggtgg ggatacaagt gtttttgtca atggcagaga 360

actgcatcaa agagatttag atttacttgt aagaagaaga ctaccacnga catctggcat 420

gtcatattct aatg 434

<210> 745

<211> 454

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-058-Q1-K1-G9

<400> 745

cagcaagcaa catagaaagt agaattcatt agcaacaata gagcatcaat ggcgaccaag 60

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cctcaatgct cacaagctcc tatagcttcc cttcttcccc cataccttcc atcaattata 180

gcttcagtat gtgaaaaccc agctcttcaa ccatataggc ttcaacaagc aatcgagca 240

agcaacatac ctttatcgcc cttgttgttt caacaatcac cagccctatc tttggtgcag 300

tcattggtac aaaccatcag ggcacaacag ctgcagcaac tcgtgctacc tgtgatcaac 360

caagtagctc tggcaaacct ttctccctac tctcagcaac aacaatttct tccattcaac 420

caactgtcta cactgaaccc tgctgcttat ttgc

454

<210> 746

<211> 437

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-058-Q1-K1-H1

<400> 746

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ccgacgtact ctcaggtgct gcggtgggac tgcccctgct gctgccgcgg gggcggcgga 120

ggggaggatg gccgcggcga cggcggcgga catggtgtgg gtgagggtgc ttgaggatgg 180

cgtgttcagg ttcgacgcgt cggaggcggc gcgcgccgcc gcggggccca gcctctcggt 240

cgcggaaccc cggcggcggg aggcgccgca tgacggggcc gacatgcccg cegttgtccc 300

ggtatgcgaa gtcgcggcgg ggggatccca gaaggtcgtg ataaagcttc ctctgggac 360

atctttctat ggtactggag aagcgagtgg ccacttgaa cggactggga aacgagtttt 420

cacatggaat acagatg 437

<210> 747

<211> 434

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-058-Q1-K1-H10

<400> 747

tgaaaaagga aaattcaaag aagaagcagg tactgtatgt catgaatccg aacaggttca 60

gggcttgtga attcctgatt cgattccatg agcaacaacg tggagacaag ataattgtgt 120

ttgctgataa tctgtttgca ctaactactt atgcgatgaa actgcgcaag ccaatgattt 180

ttggtgccac aagccatgct gagaggacaa gaattctcta ccaattcaag aacagtccag 240

aagtcaatac aatttttctt tcaaaggctg gtgataactc gattgatata ccagaagcta 300

atgttatcat acaaatatca tctcacgctg gttcgagacg tcaagaagct cagcgtctgg 360

gccgtattct cagagcatag ggtaaacc accaagtagg ggctggaaga aaagaagaat 420

acaatgcttt tttc 434

<210> 748
 <211> 210
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3061-058-Q1-K1-H11

 <400> 748

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 caccaggggc ttgcgccccg ttcacgatcc catgttcccg acgaattctt agagtgcctt 120
 cttatccctt cagacacctt caaggctctt ggtgtagctt gccactctca ccaatcaagt 180
 tctcatgtct gatctcgaca ttcagatccc 210

<210> 749
 <211> 450
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3061-058-Q1-K1-H12

 <400> 749

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 ctccattatgc tccttggtct ttctgcaagt gctgctacgg cgaccatttt cccgcaatgc 120
 tcgcaagctc ctatagcttc ccttcttccc ccgtacctct caccagcggg gtcttcggta 180
 tgtgaaaacc caattcttca accctacagg atccaacagg caatcgcagc tggcatctta 240
 cctttatcac ccttggtcct ccaacaatca tcagccctat tacaacagtt acctttggtg 300
 catttattgg cacaaaacat cagggcacaa caactacaac aacttggtgct agcaaactt 360
 gctgcctact ctgagcaaca gcagtttctt ccattcaacc aactaagttc attgaactct 420
 gcttcttatt tgcaacaaca acaactacca 450

<210> 750
 <211> 358
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3061-058-Q1-K1-H2

 <400> 750

aacacaccaa gcgaagcgca ctagcaacta cctatcacca acggctacca agatatgggc 60
 cggccttgcg cttatggggc tttgactgag cgcaacaaat gcgtccatta ttacacagtg 120
 ctcaattgat actagtgcc aattccaca gctactccga tcagttactt caatgggctt 180
 acaacattca gccgtgcaag cctacaggct acaactagcg cttgcagtga gctgcctaca 240
 acaaccaatt gcccacacgc aacaccaatg cttggcacat cttaaacttac taaccattgc 300
 aacgcagcaa ccacaccaac agtacctgcc ataaetgac catctagccg tgggtgaac 358

<210> 751
 <211> 417
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB3061-058-Q1-K1-H3.
 <400> 751

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 caaggagggc atccgcccgg accagcagcg gctcatcttc gccggcaagc agctcgagga 120
 cggtcgcacc ctgcgcgact acaacatcca gaaggagtcc aactccacc tgggtgctccg 180
 cctccgcggc ggcgccaaga agcgtgaaga gaagacgtac accaagccca agaagatcaa 240
 gcacaagcac aagaaggcca agctctccgt gctgcagttc tataagggtg acgacaccac 300
 tagcaagggtg acccgctcc gcaaggagtg cccaacaca gagtgccggc cgggcgtctt 360
 catggccaac cacttcgacc gncactactg cggcaagtgc ggccttaact atgtcta 417

<210> 752
 <211> 435
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-058-Q1-K1-H4
 <400> 752

aggcaatcgc agctggcatc ttacctttat cacccttggt cctccaacaa tcacagggc 60
 taggacaaca gttacgtttg gtgcatttat tggcacaata catcagggca caacaactac 120
 aacaacttgt gctagcaaac cttgctgcct actctcagca acagcagttt cttccattca 180

accaactagg ttcattgaac tctgcttctt atttgcaaca acaacaacta ccattcagcc 240
 agctacctgc tgcctacccc cagcaatttc ttccattcaa ccaactagca gcattgaact 300
 ctctgcttta ttacagcag caacaactac taccattcag ccagctagct ggtgtgagcc 360
 ctgctacctt cttgacacaa ccacagttgt tgccgttcta ccagcacgtt gcgcctaacg 420
 ctggcaccct cttac 435

<210> 753
 <211> 391
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB3061-058-Q1-K1-H5

<400> 753
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 caccgccact gctctccact cctctctgtg gccgccgcc tgcctctcgc cgccgtccct 120
 gctcgcgcgg cgctgggcgg cgggcgcggc ccgctgctgg gcgggtggaa cccgatccct 180
 gacgtgagcg actcgcacat ccaggagcta ggcgggtggg cgctggggca ggcgaagcac 240
 cagaagctgg ccgccgacgg gctgcgggtc cgccgcgtgg tgcgcggcga gcagcaggtc 300
 gtgtccggga tgaactaccg cctctacgtc gacgccgncg accccgccgg ccgcaccgtg 360
 ccctacgtcg gctctgtgta cgagcaagtc t 391

<210> 754
 <211> 379
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-058-Q1-K1-H6

<400> 754
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 taacaccaat ggctaccaag atattagccc tccttgcgct tcttgccctt ttagtgagcg 120
 caacaaatgc gttcattatt ccacagtgtc cacttgctcc tagtgccatt attccacagt 180
 tctctccacc agttacttca atgggcttcg aacatccagc cgtgcaagcc tacaggctac 240
 aactagcgct tgcggcgagc gccttacaac aaccaattgc ccaattgcaa caacaatcct 300

tggcacatct aaccctacaa accattgcaa cgcaacaaca acaacaacaa cagtttctgg 360
catcactgga ccacctaac 379

<210> 755
<211> 404
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-058-Q1-K1-H7

<400> 755

caagcaacat agaaagtgga atccagtagc aacaatagag caacaatggc gaccaagaga 60
ctttccctcc ttatgctcct tgctctttct gcatgtgttg ctaacgcgac aattttccct 120
caatgctcac aagctcctat agcttccctt cttcccccat accttccatc aatgatagct 180
tcagtatgtg aaaaccagc tcttcaacc tataggctcc aacaagcaat cgcagcaagc 240
aacatacctt tatcacctt gtttcaacaa tcgccagccc tatctttggt gcagtcattg 300
gtacaaacca tcaaggcaca gcagctgcag caactcgtgc tacctgtgat caaccaagta 360
gctctggcaa acctttctcc ctactatcag caacaacaat ttct 404

<210> 756
<211> 439
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-058-Q1-K1-H8

<400> 756

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gcctccttg cgcttggtgc gctttttgtg agcgcagcaa atgcgttcat tattccacaa 120
tgctcacttg ctctagtgc cattattcca cagttcctcc caccagttac ttcaatgggc 180
ttcgaacacc tagctgtgca agccaacatg caacaacaag cgcttgcggc gagcgtctta 240
caacaaccaa ttgccaatt gcaacaacaa tccttgccac atctaacaat acaagccatc 300
acaacgcaac agcaacaaca gttcctacca gcactgagcc acctagccat ggtgaaccct 360
gccgctact tgcaagagca gctgcttgca tccaaccac ttgctctggc gaacgtaatt 420
gcaaaccagc aacaacaac 439

<210> 757
 <211> 451
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-058-Q1-K1-G5

<400> 757

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 tgctccttgg tctggctgca agtgcgtgcta ccgcaaccat tttcccacaa tgctcacaag 120
 ctctatagc ttcctttctt ccccatacc tctcaccagc ggtgtcttca gtatgtgaaa 180
 acccaattct tcaaccctac aggatccaac aggcaatcgc agcaggcatc ttacctttat 240
 cacccttggt cctccaacaa ccgtcagccc tattacagca gttacctttg gtgcatttgt 300
 tggcacaaaa catcaaggca caacaactac aacaacttgt gctaggaaaac cttgctgcct 360
 actctcagca acagcagttt cttccattca accaactggc tgcattgaac tctgctgctt 420
 atttgcaaca acaactacca ttcagtcagc t 451

<210> 758
 <211> 452
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-058-Q1-K1-F12

<400> 758

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 gattatataa gtgaaccgaa cagtccggga gattccaggt ccagggtga aaaaacacaa 120
 gaacctgtta ttgacatatt gcctcagctc tatgatattg gttccagtga cagcagagga 180
 cttcaactg gaatgtggc tcgaactctt cgactaaaga ttacaggaag agatgggatc 240
 cagaaaattg atgccaggat acctgctggg ttcttagaag ggatgacaag aattattcca 300
 ggcttggctg gagctaatat tatggaaaagg ctccggaatg ctctgttga tacagacaac 360
 cccagaatg gtcaaatact gcttgatttt gaggacgcca tgggagataa gatccagggt 420
 tttattgcat gagctgatgg tgtatttgct ag 452

<210> 759
 <211> 348
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-058-Q1-K1-F2

<400> 759

gagcactagc cagggcgaac catatcgtct acctacaaca gcaacaactc ctttcaggga 60
 gggctctccc tatgggcaat gcacctacat acctgcaaca acacttgatg caacaacagt 120
 tgctgcaaca aactgcacca gctcttactc aactagctgt ggcaaact actgcctact 180
 cacaacaact actctcattc aaccaactaa ctgtgtcgaa ctctgctacg tacctacaac 240
 agcgataaca catacttaat acaatatcag cagctaacac attgatcgca gccttcctac 300
 agcagcaaca aacgctgcc aacaaccagt tctctttgat caacccta 348

<210> 760
 <211> 400
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-058-Q1-K1-F3

<400> 760

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 tgatcggttg ccttgctctc ctggcgctcg ctgcgagcgc cgctccagt acaagcggcg 120
 gctgtggctg ccagacacca ccgtttcgtc taccgcctcc gttctatatg ccgcctccgt 180
 tctatctgcc gccgcagcag cagccgcagc catggcaata cccactcaa ccaccgcagc 240
 taagcccgtg ccagcagttc ggatcctgcy gcgtcggcag cgtcggcagc ccgttcctgg 300
 gccagtgcgt cgagttcctg aggcaccagt gcagcccggc ggcgacgcc tacggctcgc 360
 cacagtgcc ggcgctgcag cagcagtgtt ggcaccagat 400

<210> 761
 <211> 390
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3061-058-Q1-K1-F4

<400> 761

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 tttaaaaaac ccaggggggtc acggggtttgg gtactatagg aacaaacccg tacccataaa 120
 cccgctgggt acagatttat gcccatthaac aaacccatgg gtatgaaaat tggcccaaac 180
 ccgtacccta atggggtaaa aacccatcgg gtttcgggta ccatttgcca tctctagttg 240
 taacccttct tcattcgtca ccaggctctgc actggatggg gaatgtgggt tccttgctgc 300
 taacctttat gcaaagagtg tttttggcga ggactctttg gtgaacatca acattgagaa 360
 gcaacatgac ggcaagctca gtggctacat 390

<210> 762
 <211> 420
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-058-Q1-K1-F5
 <400> 762

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 ctggagccgg cgaggaggat aagaagcccg cgaggggcgg cgcccacatc aaccttaagg 120
 tcaagggaca ggatggcaat gaggtgttct ttgcataaa gaggtccacc cagctgaaga 180
 agctgatgaa cgctattgc gaccgccagt ctgtggacat gaatgccatt gcattcctgt 240
 ttgatggcgg caggcttcgc ggcgagcaga ccctgatga gctggagatg gaggacggcg 300
 acgagatcga cgccatgctt caccagaccg gaagcagcgt tcctagcacc acctaaaagc 360
 agcagctgcg gagcctcggg ttgctctccg gcctgcgtag tactaaacaa aaaggaaaaa 420

<210> 763
 <211> 421
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3061-058-Q1-K1-F6
 <400> 763

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 tttggtctaa gcgcacttgc tgaatgccat agacaagacg gcctgctcca cagcacttgt 120
 ggcacgcctg cttatgttgc ccagagggtg attaacagaa agggttatga tggtgcaaag 180

gctgacatat ggtcttgtgg ggtcactctg tttgtgctat tggctgggta tcttccgttc 240
catgataaga acttgatgga catgtataag aagattgaga aagctgactt caaatgtcca 300
agttgggtttt ctaccgatgt tcggaggcctt ttgcaaagga ttcttgatcc taaccctagt 360
agaaggatct cgggtggaaaa aatcatggag aatccatggg ttaagaaggg tttaggtgca 420
a 421

<210> 764
<211> 432
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-058-Q1-K1-F7

<400> 764

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tgctctcctg gcgctcgctg cgagcgccgc ctccagtaca agcggcggtt gtggctgcca 120
gacaccaccg tttcatctac cgctccggtt ctatatgccg cctccgttct atctgccgcc 180
gcagcagcag ccgcagccat ggcaataccc cactcaacca ccgcagctaa gcccgtgcca 240
gcagttcgga tcttgcgggc tcggcagcgt cggcagcccg ttcttggggc agtgcgctga 300
gttcttgagg caccagtga gcccgggcgc gacgccctac ggctcgccac agtgccaggc 360
gctgcagcag cagtgtgtcc accagatcag gcaagtggag ccgatgcacc ggtaccaggc 420
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<210> 765
<211> 380
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3061-058-Q1-K1-F8

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cgcaagctcc tatagcttcc cttcttcccc cgtacctctc accagcgggtg tcttcggtat 180
gtgaaaaccc aattcttcaa ccctacagga tccaacaggc aatcacagct ggcattctac 240

ctttatcacc cttgttcttc caacaatcat cagccctatt acatcagtta ccttttggtgc 300
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 ctgcctactc tcaacaacag 380

<210> 766
 <211> 445
 <212> DNA
 <213> Zea mays
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 gcttcgaaca tccagccgtg caagcctaca ggctacaact agcgcttgcg gcgagcgcct 240
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 ttgcaacgca acaacaacaa caacaacagt ttctgccatc actgagccac ctagecgtgg 360
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<210> 767
 <211> 435
 <212> DNA
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 tcattggtac aaaccatcag ggcacaacag ctgcagcaac tcgtgctacc tctgatcaac 360

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<210> 768

<211> 98

<212> DNA

<213> Zea mays

<223> unsure at all n locations

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<210> 769

<211> 439

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-058-Q1-K1-G11

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ctgccaccgc cgggtccatgt gccgcccgcg gttcatctgc cgcgcgccacc atgccactac 300

cctaactcaac cgcgcgggcc tcagcctcat cccagccac acccatgccc gtgccaacag 360

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<211> 452

<212> DNA

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<210> 771

<211> 455

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-058-Q1-K1-G3

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tcattattcc acaatgctca ctgctccaa gttccattat tacacagttc ctcccaccag 180
ttacttcaat gggcttcgaa caccagctg tgcaagccta taggctacaa caagcaattg 240
cggcgagcgt cttacaacaa ccaatttccc agttgcaaca acaatccttg gcacatctaa 300
caatacaaac catcgcaacg caacagcaac aacaattcct accagcactg agccacctag 360
ccatggtgaa ccctgccgcc tacttgcaac agcagttgct tgcatcaaac ccacttgctc 420
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<210> 772

<211> 437

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3061-058-Q1-K1-G4

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